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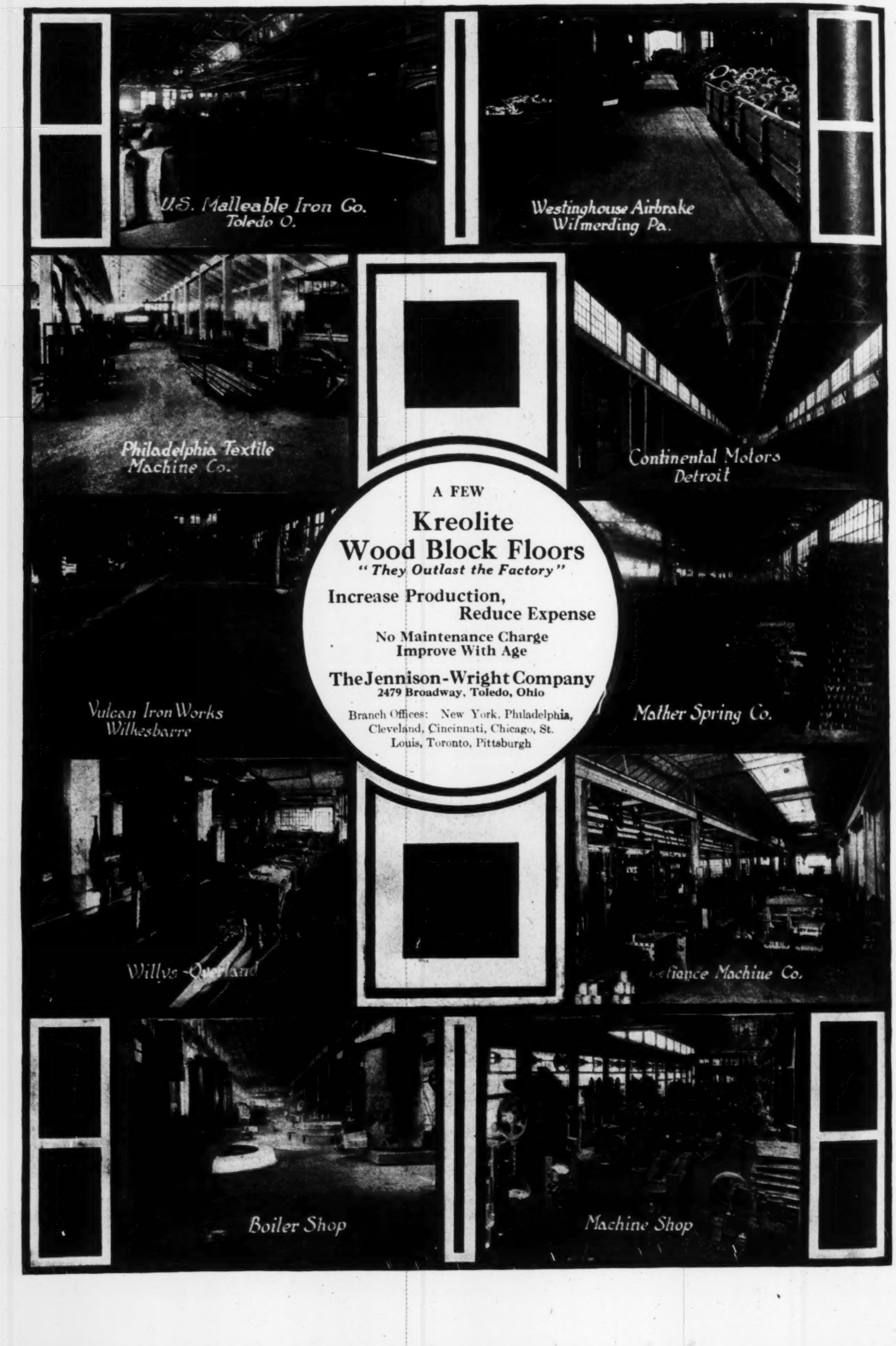
Slow-Burning Timber Mill Construction—What Is It?

It is not merely using large timbers with plank floors on widely separated beams. It is a well-developed system of construction with definite details built up through long and successful use. One of its leading exponents, F. W. Dean, Mill Architect and Engineer. Boston, tells in this issue what these details are.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A Clear Note on Society Service

ON page 1206 of this issue will be found an extract from an address by Fraser S. Keith, secretary of the Canadian Society of Civil Engineers. We have not read anywhere so clear an expression of the ideal of society service as is contained in the first paragraph of his address. The development of his ideas, too, shows a very clear vision of a society program, one that will cleave close to the membership and ensure their constant and enthusiastic support. It will be noted that he places service to the individual members on a high plane, by showing how such service is a necessary precedent to recognition by the public "of the engineer's real place in national affairs," which includes, Mr. Keith adds, "status, remuneration and opportunity of service." But Mr. Keith's address is interesting not only because of its intrinsic merit, but because it shows that the trend in professional thought in Canada is in the same direction as that here. In other words there is not merely a national unity of thought on either side of the boundary line. There is an international unity—which gives still greater validity to the society currents that are setting in both here and in Canada.

Work To Be Done on River Transportation

THE government's farseeing decision of last Spring to stimulate waterway transportation has produced disappointingly small results. In this issue is given a brief account, based on official information, of what has been done on the Mississippi, our greatest potential waterway. The sum total is nothing more than promises for 1918, and even these must fail unless the Shipping Board redeems the government's semi-official promises that barges will be furnished. The great purpose of relieving the overstrain on the railways by utilizing the rivers has so far failed of accomplishment. If more tangible results are to be obtained next season, enthusiasm and the utmost resolve must be brought to bear on the subject by all the river interests in a united spirit. Nothing is harder to change than established traffic routes, but the change must surely be made. Packet and barge routes must be organized, public terminals must be provided, and traffic must be forced rather than solicited to seek the river. The casehardened skepticism of the local business people toward river transportation—based on long-time causes—can be transformed into energetic coöperation if the government will but speak in convincing earnestness. Only a few short months are left for preparation.

Conference of Transportation Agencies

IT IS reported from Washington that a meeting will shortly be called for interchange of ideas as to methods of correlating the four chief transportation agencies —the railroads, the electric lines, the highways and the waterways. Commendation of such a proposal would, in the present situation, be gratuitous. The need stands out so strongly that one wonders how such a conference can be avoided and efficiency nevertheless secured. The real difficulty lies in breaking down the barriers to constructive thinking which competition has erected between the various agencies. Such a meeting as is proposed would materially help in breaking down the barriers. One prominent railroad man, devoting his energies to the government at Washington, has recently admitted that not until the present crises was he able to see clearly the possibilities of coördination between the railways and the highways. He had looked on the highway as a competitor. Others, without doubt, also emerging from their previous prejudices, need the help which a conference of the four agencies could give.

Is This Where the Cars Are Going?

ONE hears in Washington on the authority of men thoroughly conversant with the industry, that it will not be possible to transport across the Atlantic, by the time they are delivered, one-half of the motor trucks for which the U. S. Government has already contracted. One hears, on equally good authority, that supplies of the most vital character—those which must be in France before this country can hope to place an army on the Western front, or feed it, or supply it with arms and munitions—are held in staggering quantities along the Atlantic seaboard awaiting shipment. It is freely admitted by official and unofficial Washington that the shipping situation is the key to the present emergency. Granted these conditions, is it possible that, through lack of coördination or appreciation of the ocean transport situation, each branch and department of the Government has gone ahead buying and shipping to the seaboard the goods and munitions which it finds necessary; and that the fact that present water transport facilities cannot begin to take this flow of materials away has more than a little to do with the lack of cars and the failure of our railroads to move such essential commodities as coal? When private interests were dumping commodities at the ports of the Atlantic seaboard faster than they could be removed, the railroads were able to protect themselves by declaring embargoes. Should there be a condition in which departments of the U. S. Government were doing the same thing, and each department at the same time insisting that its freight was more important than anyone else's, the railroads would be defenseless. While Congress is investigating the railroad situation, inquiry in this direction might be productive of inestimable benefit. Should it develop that the Government departments might be better informed of ocean shipping conditions and better served thereby, or that better coördination in the time of delivery for supplies required by different departments might be secured, great improvement in the domestic railroad situation might be brought about.

A Great Step Toward Professional Solidarity

THE election of Alfred D. Flinn to the secretaryships of the Engineering Council, the Engineering Foundation and the United Engineering Society, announced in this issue, is the first great fruit of the removal of the American Society of Civil Engineers to the Engineering Societies Building. It is evidence of the determination of the four great organizations to work as one when their problems meet. On technical matters their functions will be as distinct as before. But where engineering and engineers touch the public weal or when a question concerns the whole body of the profession the distinction between the societies are to disappear. The joining of the secretaryships, therefore, important as it is for what is actually accomplished, is even more important because of its significance as a forward step toward coöperation of all engineers.

If any doubt remained as to the advisability of the civil engineers joining with the other societies in the common home, the uniting of the secretaryships in one man effectively dispels it. It bears out the prediction freely made by *Engineering News* and *Engineering Record* when the removal project was under discussion that housing under one roof would inevitably bring the societies into very close spiritual union and lead to effective coöperation.

One cannot help enthusing over the prospects that this step opens up. One feels that we are measurably close to that long-sought-for professional solidarity. Heretofore it has seemed far distant. Hope appeared when the civil engineers voted to go to Thirty-ninth Street. Now there has been such a step that even the most skeptical must admit progress, must know that the desired day cannot be long delayed. All the more hopeful is the outlook since the Engineering Council has voted to amend its rules so that other societies than the four founders may be represented thereon. The amendment is now before the governing bodies of the founder societies for consideration.

Mr. Flinn has indeed a rare opportunity. But the position will not be an easy one. Responsibility and opportunity are commensurate. At present the council is unwieldy. It has not won from the societies that freedom of action which is necessary if it is to be responsive to the profession at large; and it must be responsive if it is to have the support and enthusiasm of engineers generally. Such support and enthusiasm are a *sine qua non* of success.

Mr. Flinn comes well prepared for the tasks ahead. He deserves the full confidence of the profession and the hearty support of its members.

Steel Ships Are Being Built

THE resignation of Admiral Harris as general manager of the Emergency Fleet Corporation marks the final submergence of that body in the Shipping Board. Such submergence was a legal fact from the very start, for the corporation is but a creature of the board, formed to build ships under the less restrictive administration of a private corporation. But the public was led by the President's appointment of General Goethals to the managership of the corporation to consider that position of more importance than the chairmanship of the board. This public magnification of the place of the corporation was only increased when the President, not once more but twice, repeated the appointment of a general manager over the heads of the board, which successively showed its legal power by reducing that manager to a routine executive of the board's desires. Not until the third manager had resigned rather than accept an anomalous position was the board permitted to select its own manager. This journal considers that the building of ships—under appropriations now reaching a billion dollars—is not fit business for a government board, particularly when that board is amply busy with such activities as the chartering, licensing and manning of merchant vessels, the recruiting and training of men and the numerous judicial duties of a peace time organization. It would prefer to see the building program centered in one man, free of the Shipping Board. But lacking that the present development with a strong man like Mr. Hurley in command is the next best thing. Very evidently the chairman of the board is in the saddle, with a power and a disposition to take full responsibility for the shipbuilding progress of the next year and a half. This being a fact, this journal does not share some of the current pessimism regarding the building of ships. In spite of the friction between board and corporation, ships have been speeded up since July, at least. Of the other functions of the Shipping Board, the facts are not so clear nor the outlook so bright, but steel ships of large tonnage—the main necessity of the present time—are being built and will continue to be built at a speed far beyond the expectations of peaceful times and almost equal to that so easily demanded by the casual and ignorant critics of press and Congress.

Safe Building with Timber

DETAIL drawings are sometimes strikingly inferior to descriptive words in defining the essentials of a construction method. That is why Mr. Dean makes virtually a pioneer contribution to the literature of building by his article in this issue expounding the defining characteristics of timber "mill construction." This valuable building type—its brilliant success in the New England textile mills entitles it to highest appreciation—has unfortunately remained a localism, little known outside of the Down-East provinces; and mainly because too often drawings have been depended upon to set forth a method that in reality is the expression of an attitude of mind.

A clearly outlined word-picture is now presented of just what the method is, the objects which the designer must accomplish and various means by which he may do so. The full definition, it is true, is scattered in separate phrases through the article, but to the structural engineers they nevertheless stand out distinctly enough to coalesce into an integral statement. "The smallest practicable number of heavy beams covered with heavy smooth plank in turn covered with a top floor"; "reached by the smallest number of automatic sprinklers"; "entire absence of concealed spaces"; "the beams continuous ties to the sides of the building"; "metal deeply buried within the wood";—these are some of the elements of Mr. Dean's definition.

It is profitable to consider further a few of the points involved. Rigidity, which the article dwells on, has an intimate relation to strength, and the great strength provided in "mill construction" is a prime factor in securing rigidity. The plank-and-beam floors possess a carrying capacity of well over 500 lb. per square foot distributed loading, which is far in excess of ordinary manufacturing-floor needs. This solidity of construction has unquestionably helped to establish the type; and when we reflect on what is common practice in other forms of building, paring the loadings down to a minimum and designing to bear this minimum without excess, it is easy to see in the generous provision of strength something to be emulated.

Sprinklers find mention in Mr. Dean's exposition. Doubtless they are to be considered a vital characteristic of the type of construction. Without sprinklers and fire-wall subdivision probably no such history of success would have been recorded as "mill construction" actually can show.

Great structural strength, minimum opportunity for attack by fire, means for extinguishing or checking a fire starting in the contents, an arrangement that will confine a fire to a small section, rigidity, and stability not only when completed but also when partly fire-wrecked—these elements secured by the use of timber framing in a quickly-erected, economical form are comprehended in "mill construction." The type is worth far more attention than it has received in the recent past. We have neglected timber construction unduly and invested many a dollar in buildings of more costly type that can show no record of superior strength, permanence, or fire-resistance. In the days to come of more urgently imperative economy, "mill construction" and other ways of utilizing timber will again claim close attention.

Uncoördinated State Engineering Sets a Problem

WHILE every engineering organization in the land is straining for increased efficiency to meet the demands of the times, state engineering work continues in the formless, haphazard condition that has characterized it for years past. The inefficient scattering of engineering work among many separate state bureaus has long been in need of reform. But today the mobilization of the country's engineering resources calls for immediate action to change this condition—by emergency methods, if needful.

A well-known engineer who is in close daily touch with the technical bureaus of one of our richest states makes a significant remark about them. He says that not only are the several engineering offices totally uninformed about each other's problems and working methods but even the men are strangers; the engineers of one bureau are not acquainted with those of other bureaus. This remark, however surprising, will be found equally applicable to many other states.

A dozen or more large engineering departments represent the sovereign authority of a great commonwealth in relation to a multitude of public-welfare questions; and these numerous bodies act just as if each one existed alone, as if their work had no interrelation or points of mutual contact.

No need to ask whether real efficiency is secured when such a condition exists. The state is in precisely the same position as any private corporation in regard to the necessity for centralized administration. It cannot secure reasonable over-all efficiency in its engineering work when this is split up among many autonomous offices. Waste, duplication of effort, imperfect utilization of experience, are inevitable consequences.

The existing state of affairs is not to be blamed on engineers. It came about through no fault of theirs, during the rapid growth of state engineering within the past ten or fifteen years, when legislatures created department after department to care for new needs; looking at the subject from the administrative side only, the lawmakers disregarded the essential engineering unity of the work involved. Engineers on the contrary have done their part to achieve a good result even under the conditions thus forced upon them. They have labored in their several departments efficiently and conscientiously. But this could not make headway against the inherent lack of coördination.

While engineers, therefore, are not responsible for low efficiency and lack of system in state engineering, yet the burden of the present obligation to reform lies mainly upon them. They alone are able to perceive the present compulsion toward immediate coördination, and therefore, from them must come the initiative.

The problems of next year's work are already presenting themselves. They demand coördination as a prerequisite to their solution. The selection of urgent construction and the elimination of the non-urgent; the allotment of money and labor to either maintenance or construction, whichever shall be found to be more productive; the adjustment of administrative and regulatory activities to the special needs of the times—such questions must be subjected to fullest study. Engineering analysis is required, and all the experience and knowledge of the state's departments must be joined in the study.

The situation calls for early coördination of the engineering departments, or at least of their engineering thought, within the government of each state. If it can be secured quickly enough through legislative or executive action, official coördination gives the best promise of success. Failing this, however, the engineers themselves can bring about a result sufficient for the moment's needs.

Let representatives of separate departments come together of their own motion, unofficially, and as a technical association discuss the state's technical problems. If their study is thorough, and their conclusions clear and courageous, they are sure to have the people's support.

What Is Mill Building Construction?

An Exposition of the Essentials Governing This Type of Fire-Resisting Building and of the Details That Distinguish It

By F. W. Dean
Mill Architect and Engineer, Boston

SLOW-BURNING mill construction is the name applied to a long-used type of fire-resisting timber building common in New England, especially in textile mills. The name represents a very definite idea in design and construction, and one well understood by those accustomed to building this type of structure. It seems to the writer, however, that many architects and engineers are not sufficiently familiar with the fundamental requirements of mill construction and are apt to consider it merely the use of plank floors resting on widely separated beams. In fact, the technical press has of late published designs of so-called mill construction which not only violate the rules of that construction but which may cause the very trouble it is intended to avert. It seems desirable, therefore, to state as briefly as possible how a mill construction building should be designed, giving the reasons, with illustrations, for the methods described.

In the design of factory buildings, certain principles should be clearly kept in view. In a general way, it can be stated that these are minimum opportunity for the occurrence, travel and wrecking effect of fires—with a resultant low cost of insurance—rigidity, and great admission of light. These conditions are realized to the maximum by two types of construction, the older being mill construction, and the newer reinforced concrete. As fire risks, both are considered by the mutual insurance companies as first-class, and their relative values as such in the estimation of these companies is shown by the net rates which they make, which are about 5.5c. per $100 for mill construction and 4.8c. for reinforced concrete.

New England Leads in Mill Construction

Regular mill construction originated in New England and is, or has been, carried out to the greatest perfection in that part of the country, and chiefly in textile mills. As now designed by the best mill engineers, it consists of brick walls, with heavy transverse wood beams, on top of which, for floors, are spiked thick planks at right angles to the beams, and these planks are covered with a top floor at right angles to the planks. The planks are grooved on both edges and so-called wood splines are tightly driven into the grooves of adjoining planks so that one plank will assist in the support of the next, thus stiffening the floor for isolated loads and preventing one plank from moving vertically relatively to the next (Fig. 1). The spaces between the beams or the "bays" should not be so wide as to require beams at right angles to the main beams, or any subdivision of the bays. A maximum bay width of 10 ft., except to accomplish a special object, is advisable. Wherever any metal is used it should always be deeply buried within the wood so that fire cannot reach it at first.

From the above it will be seen that real mill construction contemplates the smallest practicable number of heavy smooth beams covered with heavy smooth plank in turn covered with a top floor. The mass of such construction, the small amount of surface and the smoothness of the surfaces are fire resisting, and merit the name which is often applied to it, of being "slow-burning." Compared with this, the floor and roof construction consisting of planks on edge for beams and a foot or two apart are kindling wood. Mill construction also contemplates the entire absence of concealed spaces and the use of such spaces as can readily be reached by the spray from the smallest number of automatic sprinklers. It will readily be seen that the spaces between the beams of mill construction can be reached by a few sprinklers, while with the older construction many times as many sprinkler pipes and heads are required to give protection, as every part must be reached by the spray.

The beams of mill construction afford opportunity for supporting shaft hangers, and the spaces between them give room for pulleys and belts. If short countershafts are to be put up the wide flat surfaces between the beams afford an opportunity for attaching them.

Pintles Over Columns Are Fundamental to Type

Reference has been made to rigidity. The method of fastening the beams to each other where they butt together, and to the walls, is of great importance in securing this end. This must be considered in connection with the columns, and it is with respect to these and connecting the beams together that architects unversed in this type invariably fail. It is well understood that columns should rest end to end upon each other from top to bottom of buildings, but the columns themselves should not pass through the floors and between the ends of the beams, as is often done. Proceeding upward they should stop at the bottoms of the beams, and begin again at the tops. Between the top of one column and the bottom of the one above it there should be a short separate cast-iron column known as a "pintle" (Fig. 1). Being of cast iron, which is a material of great compressive resistance, it may be very small in diameter, and requires only a small hole through the beam to accommodate it, half of the hole being in the end of one beam and half in the other. The lower end of the pintle rests on the cap of the lower column and the top of the pintle receives the lower end of the column above.

There are several advantages in this construction. In consequence of it, the beams actually butt against each other, and having only a small hole through them (not much over 4 in. in diameter) the ends of the beams are actually over the body of the column and are not supported by the overhanging ends of the column cap.

If a cap end is burnt off or breaks off the beam is held as securely as ever. It is a common thing for architects to carry the lower end of a column to the top of the one below, and sometimes both columns are of the same size. The result is that the beams are supported by the overhanging ends of the column caps. This is dangerous construction, in respect to both strength and fire resistance. The end may break if of cast iron, bend if of steel, become soft in a fire and cause the floor to fall. In this construction most of the cap, and the whole of the part which supports the beam, are exposed to the fire.

The pintle construction, as before stated, permits the beams to butt against each other and thus become perfect struts to transmit pressure from one side of the building to the other, and it also gives room to put two iron dogs, or ties in the tops of the beams, one on each side of the pintle, to tie the beams together. Thus the beams become not only struts but rigid and continuous ties to keep the sides of the building in their proper relative positions. At the same time the pintles and dogs fulfill the necessary conditions before mentioned of being surrounded by heavy wood, for the pintles are within the beams and the dogs are embedded in grooves in the tops of the beams and covered by the floor planks. Moreover, the dogs cannot work out because they are beneath the planks (Fig. 1).

Where the pintles enlarge at the top to take the upper column only the top edges should be exposed to fire and can scarcely be injured. It should not be overlooked that when the beams and planks shrink the pintle tops become more exposed than at first, and allowance should be made for this. It should be observed also that the enlarged hole for the top of the pintle is in the plank and not in the beam (Fig. 2).

Still another advantage of pintle construction is that if a floor falls and a column below is knocked over by the falling floor or a heavy piece of machinery, it simply tips over on top of the pintle. A column which goes down between the beams if knocked over would pry the beams apart, punch a hole through the wall, possibly push it over, and cause the beam to drop off the column and fall. Thus the building might be wrecked on account of the absence of pintle construction.

RIGIDITY OF CONNECTION IS NECESSARY

The beams must be connected to the wall in such a way that the walls will not be pushed or pulled until after this connection is made, such effort only coming from wind pressure or manufacturing strain. The beam ends should rest in cast-iron boxes with side wings firmly built into the walls (Fig. 2). The beams should then be made to butt firmly over the columns and be drawn together by driving in the dogs which for this purpose have their ends inclined where entering the wood. When this is done one or two lag screws should be screwed into the beams through holes in projecting lips of the beam boxes, which completes the connection across the building. After this is done the lips of the column caps are lag-screwed to the beams, thus making

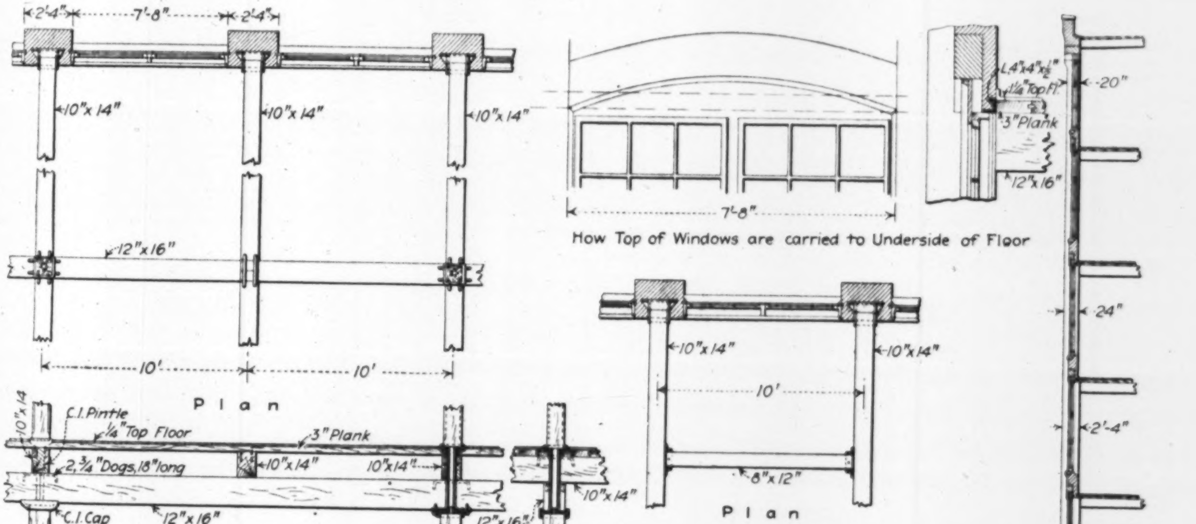

2'-4"
7'-8"
2'-4"
10"x 14"
10"x 14"
10"x 14"
12"x 16"
10'
10'
Plan
10"x14
C.I. Pintle
¼" Top Floor
3" Plank
2, ¾" Dogs, 18" long
10"x 14"
10"x 14"
C.I. Cap
12"x 16"
10"x 14"
12"x 16"
20'
Longitudinal Section
(Details where Columns are omitted in every other Bay)
7'-8"
How Top of Windows are carried to Underside of Floor
L 4"x 4"x ½"
1¼" Top Fl.
3" Plank
12"x 16"
10"x 14"
10"x 14"
10'
8"x 12"
Plan
10"x 14"
8"x 12"
10"x 14
Longitudinal Section
(Where Intermediate Beam is used)
Cross-Section
20"
24"
2'-4"
2'-8"
3'
3'-4"
Walls stepped back at each Floor
8"x 14"
8"x 8"
8"x 14"
8"x 8"
Method of Giving Roof Slope

FIG. 1. WALL, COLUMN AND FLOOR DETAILS OF TYPICAL MILL CONSTRUCTION

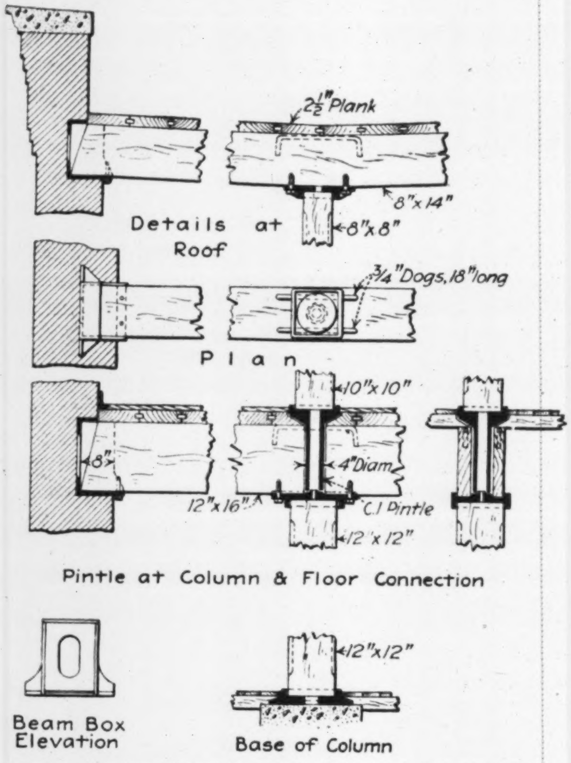


FIG. 2. SOME SPECIAL DETAILS USED IN FRAMING MILL CONSTRUCTION

the columns stable and preventing the beams from pressing against the pintles. Thus the column caps as well as the dogs hold the beams firmly together. No attempt should be made to have the pintle fit the hole, as it should be free to maintain its position as the beams are moved slightly when the dogs are driven. In fact the hole for the pintle should be at least ½ in. larger in diameter than the pintle (Fig. 2).

Beams usually end over columns, but if they do not, a hole is bored through for the pintle, and dogs are not required.

Floor-beams when double should have no space between them as was formerly provided in order to permit air to circulate between, as these spaces hold fire tenaciously.

There is a very pernicious practice of supporting intermediate cross-beams so that their upper surfaces are level with those of the beams which they join. This is effected by the use of forged stirrups or commercial beam-hangers. When a fire occurs they are easily softened and give way if they support any material weight, which they often do. Beams should never be supported in this way if it is possible to avoid such construction, and if they are, heavy cast-iron beam-sockets should be used lag-screwed to the beams Fig. 2). The commercial beam-hanger is a great menace to the safety of buildings.

Roofs are framed, supported and planked after the manner of floors, using dogs, and the latter should be driven before the brickwork is built around the anchors in the walls (Fig. 2). When there is not a row of columns in the center of the room, the roof beams should not be carried on the slant to the center of the building and there fastened together, with the expectation that a stable roof will result. Horizontal beams should run between the two rows of columns next to the center and the roof slant given by wedge-shaped pieces spiked to the beams (Fig. 1). Roof beams are not usually secured to the walls by means of beam-boxes, but they might be advantageously employed, especially if parapet walls are used. Wrought-iron anchors spiked or screwed to the beams are generally used (Fig. 1).

SPECIAL BEAM ARRANGEMENTS POSSIBLE

Sometimes it is desired to have columns omitted in every other bay, and the beams that do not rest on columns must be supported by longitudinal stringers resting on top of the columns that are used. Many architects in this case yield to the temptation to use the beam-hangers disapproved of above, but instead of this the stringers should be lower than the transverse beams by the depth of the latter, and the intermediate transverse beams should rest on top of them, and be fastened thereto (Fig. 1). Thus slow-burning construction is fully realized in this detail. The stringers are separated from the floor by the depth of the transverse beams, and the space thus provided is very convenient for the upper strands of belting. In this construction vertical shrinkage of the beams is considerable, and the pintles, which are long enough to go through both longitudinal and transverse beams, should be rather short, so that after the shrinkage the top will not appear materially above the floor.

Floor planks are usually 2½ in. to 5 in. thick and in widths not exceeding 10 in. They should be at least two bays long, but there must be enough one-bay lengths to cause breaking of joints. It is not necessary to have every other plank break joints; four or five planks of the same length can be laid side by side and the next set can break joints with these. Where floor planks are interrupted by pintles they should be fitted under the pintle to some extent, so that their ends will rest on the beams. This with the splines and top floors will support them. Otherwise they should rest on a stick secured to the adjoining planks by lag screws.

BEAMS WRONGLY PLACED

It is inadvisable to have beams at right angles to the main transverse beams in a factory—that is, parallel to the sides of the mill. One objection to this is, that if they are not at or near the center of the building they cut off the top light. Some architects wrongly place such beams against the sides of the building above the windows, and thereby prevent the tops of the windows from being as high as they might be, and close to the underside of the floor. These beams are hung to the transverse beams by means of the objectionable hangers already commented upon, and even intermediate transverse beams are sometimes hung to them. If the bays are not too wide intermediate beams are unnecessary, but architects often make the bays so wide that they are compelled to use intermediate beams, and this causes them to run the planks the wrong way.

The tops of the windows can be brought to the underside of the floor by building the arch in the next story above. The opening which would thus be made above the upper floor is closed by not carrying the arch clear through the wall. One course of brick carried down to the springing of the arch is sufficient to close the opening, and this is supported by an angle iron spanning the window opening (Fig. 1). If a straight arch is used this is supported by angles or other forms of structural material.

The beams are usually made of long-leaf Southern pine, which formerly came chiefly from Georgia, but the name "Georgia pine" is now chiefly a name, as such pine comes from any state south of North Carolina, and even from Cuba. In Canada, British Columbia fir is largely used and since the Panama Canal was opened this kind of wood from Washington and Oregon has come East in considerable quantities. It can be obtained of any desired dimensions and although not quite so strong as Southern pine is a better wood in other respects. It is clearer, freer from sap, more uniform throughout its texture, and less likely to crack, than Southern pine. On account of its good qualities, it is, practically speaking, as strong as Southern pine. Beams should be chamfered on the lower edges between bearings, for the sake of appearance, and, some persons have stated, to do away with corners which readily ignite.

FLOOR DETAILS ARE OF FIXED TYPE

Floor planks are made of spruce or pine, planed on three sides, grooved for splines, and for appearance slightly beveled or beaded on the bottom edges. The splines are made of clear yellow pine and are always ¾ in. x 1½ in. and, as already stated, should fit tight enough to require driving in. The planks should end on the centers of the beams, and be nailed on each beam with two nails of such lengths that two to three inches should penetrate the beams.

On each side of a room a plank should be left out until the building is well dried, as the planks sometimes swell enough to push out the walls.

On the planks there should be one or two layers of tarred paper, or, better, a paper covered with an elastic material which will fit around the nails securing the top floor, in order to make the floor waterproof. Such a lining is intended to continue to be tight around nails after the floors shrink.

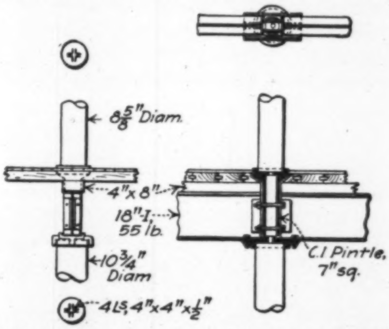


FIG. 3. PINTLE DESIGN FOR METAL COLUMNS

In Canada, and to some extent in this country, it is the practice to use for floors planks on edge nailed together horizontally. It is not customary to end these strips over the beams, but anywhere. This weakens the floor seriously and should not be permitted. Sometimes, if such floors are very thick, they are not fastened to the beams.

Top floors are usually of square-edged maple of ⅞ in. nominal thickness, but sometimes thicker. The boards are commonly 5 in. wide and should not be less than 6 ft. long. They should be kiln dried, wedged together when laid, nailed with two nails 16 in. apart on diagonal lines, with two nails at the end of each board independent of the diagonal nailing. Sometimes top floors are laid diagonally, but little or nothing is gained by this and the cost is a little more. All nails should be set and the floor planed if it is not smooth enough without it.

Steel beams are used somewhat in mill construction buildings, but are not liked by the insurance companies as well as wood. They tolerate them, however, trusting to sprinklers to keep them cool in case of fire, and consider that a fire will be confined to one story. Their advantages are that piers are not cut away by their use as in the case of wood and can therefore be narrower, thus increasing the window width, and columns can be farther apart. The beams should be laid on the walls as the work proceeds, with one brick course fitted around them in the face of the wall, and the pocket thus formed filled with cement grout. The brickwork can then proceed and the wall is not reduced in cross-section where the beam enters. If steel beams are used pintles should not be omitted, and beam boxes might be used.

ANCHORING OF STEEL BEAMS

The anchoring of steel beams in walls is not quite so desirably accomplished as with wood. The common way is to have a couple of short pieces of steel angle riveted vertically to the web near the end of the beam to anchor it, and build the beam in as described above. The beam can be drawn up to the pintle before this is done. If the beam falls in a fire it will pry out some of the brickwork. A beam-box could be used, as in the case of wood beams, and bolted to the lower flange of the beam before the box is built into the brickwork. The beam and box could then be slid as the beam is drawn up to the pintle.

Square or rectangular pintles look better with steel beams than round ones, as the beam ends fit against them better. Sometimes the lower flange is bolted to a bracket cast on the bottom of the pintle and sometimes the web is bolted to an appropriate projection on the pintle. The best way is to rivet angles to the web, and bolt the beams together by means of bolts passing through oblong holes cast in the pintle, as in Fig. 3. Care must be taken to have the beam rest over the top of the column and avoid transverse stress in the pintle brackets.

The remarks on floors will apply to roofs, except that spruce sometimes warps and turns up its edges so that it may injure the roof paper. The standard slope of mill roofs is ½ in. per foot.

Concerning roof coverings, there are many different makes, any of which will be furnished with a guaranty of five or ten years. Tar and gravel are very satisfactory and should be five or six ply thick. Thick roof coverings of this kind are important in some places on account of their heat insulating qualities, which assist in preventing condensation of humid atmosphere on the underside in cold weather.

The undersides of roofs and floors are sometimes painted white, but the cracks between the planks makes them look bad, although the lighting effect is good. Likewise, brick walls can be painted, but the natural

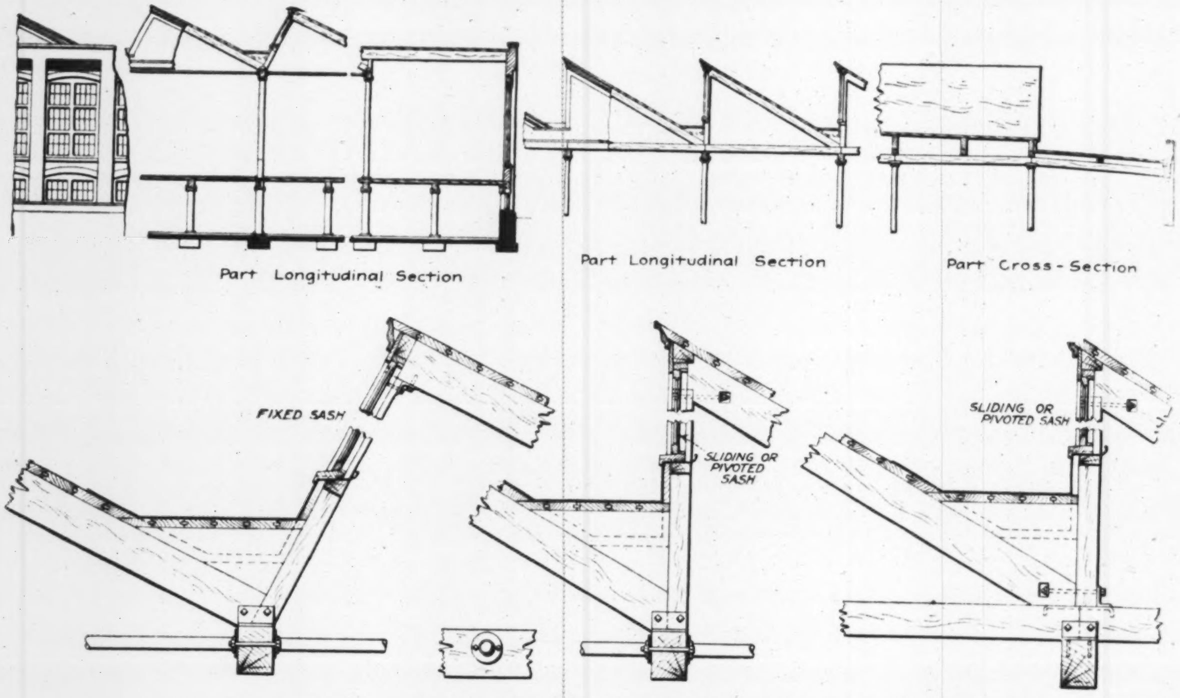


FIG. 4. HOW SAW-TOOTH ROOFS ARE DETAILED IN MILL CONSTRUCTION

brick looks better. Brick looks best when washed down with acid and oiled.

Columns and Walls Have Some Variations

Columns are usually made of long-leaf Southern pine and should be carefully selected for straightness of grain and freedom from defects. It is very important that the ends should be square with the axis, and when the columns are round this is easily accomplished in the lathe. Wood columns are often made as small as 6 in. square, but they are very apt to spring and in hot factories this is true of columns of any size. Practically, it is better to have 8 in. the minimum size. Pipe columns filled with concrete are used, but the mutual insurance companies consider wood columns a better fire risk, and where the pipe concrete columns are used they prefer to have a reinforcement placed inside, this being strong enough to support the load. The stock companies do not require this. This type of column without interior reinforcement went through the Salem fire successfully. Even with these columns, or those of cast iron, pintles should be used. Both ends of pintles should be faced off square and likewise the surfaces with which they come in contact, and pintles for square columns should have a circular face on which the column rests so that it can be faced in a lathe or boring mill (Fig. 2).

Wood columns were formerly bored and ventilating holes made at top and bottom. The benefit of this cannot be ascertained and the practice has been generally abandoned.

The upper and lower ends of wood columns should be treated with a preservative, especially the lower ends, as they are frequently wet from washing the floors.

In building such a factory some designers have slanted the piers between windows inward on the outside of the building. This is expensive and useless, and it should be kept in mind that the center of pressure coming from the weights should be as near the center of the foundation as possible. By stepping the walls back 4 in. or more at each floor on the inside of the building, or at every other floor, this is partly accomplished and the outside of the pier can be kept vertical (Fig. 1). If the pier is inclined or made like a stepped buttress on the outside, the result is that the foundation will be eccentrically loaded. These inclined or buttressed pieces accomplish nothing desirable.

If a wood floor is desired in the basement the best way is to make a tar concrete and wood floor, as follows: The earth should be filled-in layers 6 in. thick and rammed level. On top of this there is to be a layer 3 in. thick of hot tar concrete laid and rolled firmly and level, the upper ½ in. being of fine material laid hot and well rolled to prevent moisture from coming through. On this there is to be a layer of unplaned square-edged plank 2½ in. to 4 in. thick, laid close. The plank should be kyanized or treated with other preservative to prevent decay. A top floor is then laid at right angles to the plank and well nailed. The plank need not be splined, because there is no chance for vertical movement.

It is not well to use sleepers, as it is difficult to surround them properly with tar concrete and difficult to get them level, and they accomplish nothing useful. A floor as above described is a heavy solid mass and is bound together by the top floor. Experience shows that it is satisfactory without being fastened to anything and is suitable for holding any machinery that does not require foundations. It is good where wet processes are carried on.

The top story of a factory is often surmounted by a monitor roof which adds to the light in that story, but saw-sooth roofs give the best light. They should face the north, or as near it as the location of the factory will permit. If they face the north, the light on a cloudy day is about as good as on a bright day, and it is difficult in such rooms to tell whether the sun is shining or not. The details of saw-tooth roofs are something of a problem. One of the difficulties is devising proper draining of the valleys between the saw-teeth. If the buildings are narrow, the valleys may slope from the middle to the sides of the roof, but if they are wide there should be several such slopes, and drainage should be provided at several points. Sometimes the whole saw-tooth is highest in the middle of the roof and slopes toward each side, even in wide buildings. Such construction produces awkward looking roofs, and causes the windows in the faces to be stepped. The writer prefers to keep the ridge of the saw-tooth level and slope the valley planking from high points to low, which presents no difficulty. The roof beams can have different slopes, the high ends being on the same level and the lower ends at different levels, the planking forming a warped surface. However it is done, it is almost necessary to plank the valleys over to provide a wide flat space next to the window face, but care must be taken to avoid concealed spaces in this detail.

The horizontal beams below the saw-teeth, when used, and the beams between the ends of the saw-teeth and the sides of building, are usually supported from the main transvers beams by means of exposed metal hangers, such as have been elsewhere condemned, even in designs by the best mill architects. This construction, of course, should not be made, on account of its poor fire resistance.

FACES OF SAWTOOTH ROOFS

Saw-tooth roofs are built with either inclined or vertical faces. The former are generally used, but vertical faces are easier to construct and permit the use of swinging or sliding sashes, while inclined faces must have glass reaching to the bottom of the windows, or water will stand on the horizontal mullions and finally leak through. Furthermore, condensation on the inner surface of inclined glass will drop on the floor and goods in process, while it will run to the bottom of vertical glass, where it can be caught. In either case, the flashing should run under the window stool and be formed into a drip pan, with ends stopped up, from which it can run out through grooves in the underside of the stool. Which form of saw-tooth should be used depends more upon the feelings of the designer than anything else. Inclined faces probably let in more light than the others, but it would require careful observation to detect any difference.

If shafting is to be overhead in a saw-tooth building wood stringers are used overhead for supports, and they serve to tie the saw-teeth together. If the shafting is located below the floor, the overhead stringers are omitted and tie rods are used. These rods sometimes run through pipes which serve as struts and obscure the sag of the rods, but the pipes only should be used, and if properly secured at the ends serve both as ties and struts.

In Fig. 4 is shown how the principles of slow-burning mill construction can be applied to saw-tooth roofs. To avoid metal beam-hangers the longitudinal beams rest on top of the transverse beams and may be secured to them as shown or by spikes or other means which may occur to the designer. He should have in mind that what metal he uses should be buried in wood if possible, and if not it should be above the beams.

Resting the saw-tooth beams on top of the main transverse beams, which secures maximum fire resistance, causes the valleys to be narrower than most designers like, but by planking over high enough, sufficient width can be obtained.

Persons interested in the quality of hard pine for mill construction are referred to a pamphlet issued by the Inspection Department of the Associated Factory Mutual Fire Insurance Companies, 31 Milk St., Boston, Mass., entitled "Dry Rot in Factory Timbers," and to matter published by the Southern Pine Association, New Orleans, and the National Lumber Manufacturers' Association, Chicago, Illinois.

Philippine City's Lowland Raised by Harbor Dredging

Valuable River Front Property in Iloilo Developed by Selling Fill to Private Owners and by Creating Public Areas

BY W. C. A. PALMER
Supervising Engineer, Western Visayas, Iloilo, P. I.

MAKING river-front fills from dredged material is no new thing, but as a rule it is either a casual disposal of earth which has to be removed in channel improvement or else it is a scheme for reclaiming land. In the city and harbor of Iloilo, P. I., there has been a combination of the two, with the added factor of the sale of the filling material to private owners who wished to raise their low ground.

The location of the city is such that a great deal of lowland lies adjacent to the Iloilo River, a tidal delta stream. Virtually, the entire city is delta land, built up by river and sea deposits. The Island of Guimaras lies about two kilometers, across Guimaras Straits, from the mouth of the Iloilo River. There is a range of tide of about two meters and the river is constantly silting up, both from the straits and from the upper reaches of the river. This has made it necessary to expend from $15,000 to $20,000 annually in keeping the river channel free for the uses of navigation.

The first dredging operations for the benefit of navigation in the river were made in 1906, about the time of the construction of the Philippine Railway Co.'s terminals at the mouth of the river. At this time two jetties of riprap and fascine wall were constructed by the J. G. White Co. and its suction dredge filled in all that part of Iloilo now occupied by the railway company's shops and administrative offices. In 1909-10, the Atlantic, Gulf and Pacific Co.'s dredge "Manila" was brought to Iloilo, and lowlands were filled from the spoil dredged out of the river. At this time the lowlands from the lower reach up to about the center of the town were filled, this land belonging in the main to large property owners. For several years after 1910 no fill was attempted. An elevator dredge from Manila was sent down each year and spoil was loaded into scows alongside of the dredge, carried out into the bay and dumped. For the past few years, this work has been done by the Philippine Government's steamship "Dredger," a sea-going self-propelling suction dredge of the hopper type.

In the past it has been the custom to remove from the river about 250,000 to 300,000 cu.m. of deposit, carrying it out into the deep channel, and letting it go to waste. In 1916, the district engineer of Iloilo made an attempt to use the discharge apparatus of the steamship "Dredger" and filled certain of the lowlands abutting the Iloilo river, notably the Iloilo Custom House site, where a new $150,000 structure has just been completed. This work resulted so satisfactorily and caused so much favorable comment that when arrangements were made for the annual dredging of the river the property owners, as well as the provincial governor and health officials, requested that the Government follow the same procedure for general land filling in 1917. Therefore, by an act of the Philippine Legislature, an arrangement was made whereby property owners could contract with the proper authorities for the delivery of such spoil as was incident to the harbor improvements, the same to be delivered upon their lands at the actual cost of such delivery. These contracts are made to cover a period of five years, payment to be made in five equal instalments and the first instalment falling due one year from the date of execution of the contract.

Meanwhile, suction dredge No. 3, a modern 15-in. dredge, having a capacity of about 2000 cu.m. daily, was sent to Iloilo to clean out the river. Inasmuch as experience has taught that the river silts from the reaches above the town and from the bay both, it was decided that by dredging the upper reaches of the river in such a way as to create an eddy much of the silt would be deposited before coming into those areas ordinarily filled with silt.

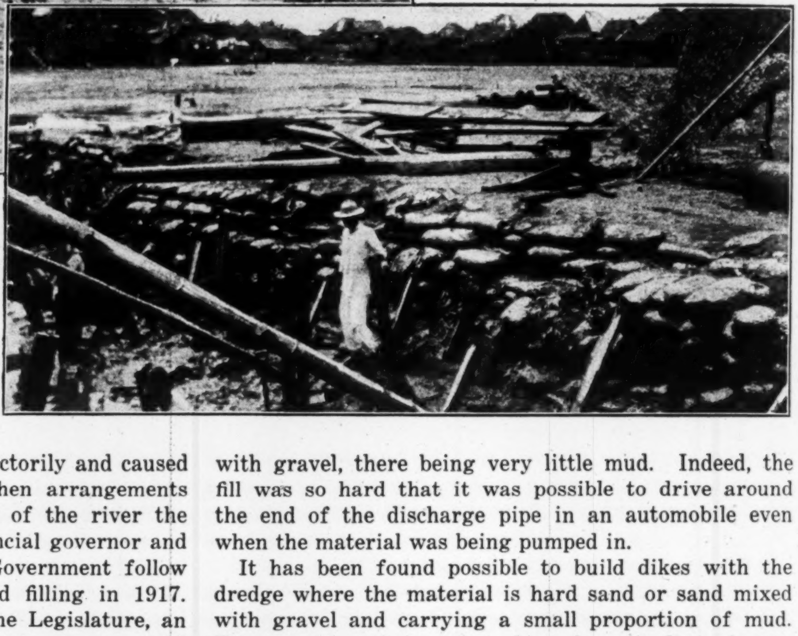
The lower reaches of the river fill up from the action of the monsoons and a strong 8-mile current that flows both ways, forming an eddy in the mouth of the river. The jetties built only partially keep the river clear, so it is always necessary to dredge the bar annually.

The first land to be filled was the site of the new public market, an area of 10,000 sq.m. (about two and one-half acres) filled to an average depth of slightly over one meter. To reach this location, it was necessary to pump through a pipe line over 450 m. in length. Work was slow, owing to the fact that the dredge had received severe buffeting on its voyage to Iloilo, and from time to time repairs were necessary. However, the fill was so good that construction work on the La Paz market was started. This fill was a pure sand, mixed with gravel, there being very little mud. Indeed, the fill was so hard that it was possible to drive around the end of the discharge pipe in an automobile even when the material was being pumped in.

It has been found possible to build dikes with the dredge where the material is hard sand or sand mixed with gravel and carrying a small proportion of mud. The pipe is carried on shear legs along the line where a dike is to be built, and the joints of the pipe are opened sufficiently to allow the material to fall through as it passes the joints. In this way, it has been possible in the beginning to run up a pipe line along the outside of a lot, build a dike to the required height and to retain all of the lighter material and mud which comes later, and which, without an exceptionally good dike, floats away and is lost. Inasmuch as this light material is a considerable percentage of the whole, it is well worth saving.

Those owners who abut upon the river were obliged to build a riprap wall which, when covered with "sawali" (woven bamboo mats), proved to be an excellent type of retaining wall. These pieces of property which have been filled by the dredge have come, from worthless property, to be about the most valuable land in the City of Iloilo, being river frontage available for wharfage.

RETAINING WALL OF SAND AND MUD-FILLED GRASS SACKS HOLDS DREDGED FILL



DELIVERING HYDRAULIC FILL AROUND RIVERSIDE HUTS IN ILOILO, P. I.

It is also close to the new market and railroad station, and is valuable both for warehouse and store property. In addition, this district, from being a low, unsanitary spot which was a constant menace to the health of the community and a breeding place for mosquitoes, has been changed into a high, pleasant and very sanitary section of town.

The cost to date of this work has been high, even higher than anticipated, owing to the fact that it was about a month before the dredge was working properly; also, due to the high cost of fuel, coal being $18 per ton. Coal at this price cost at the rate of $140 per day. An economy was found possible in the use of wood "rajas," selling from $16 to $23 per thousand according to size, and costing from $68 to $90 per day. It is necessary to use some coal, however, so fuel amounts to about $75 to $80 daily on an average. Other economies have resulted in a marked decrease in the use of oil and babbitt metal, so the dredge daily costs less to run and increases in efficiency.

About 45,000 cu.m. of fill have been handled at a gross cost of approximately $10,000, or an average of 22c. per cu.m. of fill in place. This is the total cost, and includes the expense of bringing the dredge from Manila, a sea voyage of 365 miles, and rather expensive repairs which were made in the beginning and which must necessarily be prorated to the whole project. Also much of this cost is directly chargeable to maintenance, so that the final cost of this fill to the property owners should be approximately 15c. per cubic meter.

The more fill made the lower the resulting cost to the property owners, and, as a consequence, the officials were very desirous of doing as much of this work as possible. Applications for fill have increased beyond the possibility of handling, and the excessive cost of pipe line, under the present freight condition, is such that it is prohibitive to buy more pipe, costing as it does $7.50 per foot. This necessarily limits the distance to which fill can be delivered. The response in Iloilo has been very gratifying indeed, and the dredge will be worked as long as conditions will permit.

Building Frame Houses for Miners As a Contract Job

Several Hundred Just Completed for West Virginia Company—Model Single House Designed—Field Methods Used

By C. S. Rindsfoos
Jarrett-Chambers Co., Inc., New York City

A GROWING field for the contracting organization, and one which the labor conditions of the future promise to increase in size and scope, is the construction of large groups of workmen's dwellings. The company with which the writer is connected has been building a large number of such houses, mainly of wood frame, in the coal mine districts of West Virginia. A description of some of the work will indicate the nature of the operations.

STREET IN WEST VIRGINIA MINE HOUSING DEVELOPMENT, SHOWING CLEARING TO BE DONE

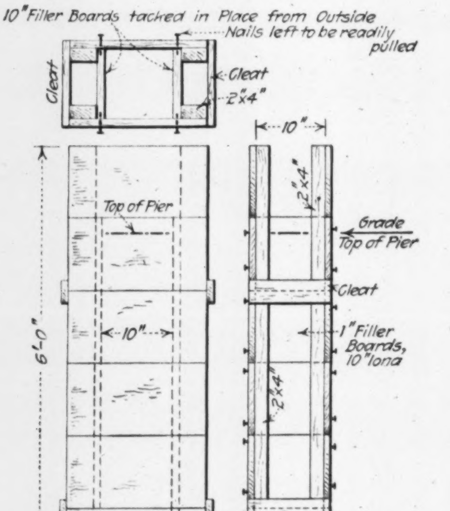
The principal group of dwellings comprises the single-family four-room houses for the West Virginia Coal & Coke Co., of Elkins, W. Va., and for the McCaa Coal Co., of Gilmer, W. Va., which are illustrated herewith. They are of a type developed by the former of the two companies, of semi-bungalow style, with plain gable roof, ample window openings and of box-like form which entails the least waste of space.

These houses cost about $1200 each, which is not great when consideration is taken of the character of the houses and the current war prices. Briefly described, they contain one living room, two bedrooms, and a kitchen, each 11 ft. 4 in. x 13 ft. 4 in. A small room, 6 x 10 ft., off the kitchen provides pantry space, and there is a 6 x 10-ft. "commode" adjacent to one of the bed rooms. A central flue, consisting of two columns of 8 x 10-in. tile encased in brick, takes care of the four rooms—that is to say, provision is made for a range in the kitchen, stove in one bedroom and open fireplaces in the living room and front bedroom. The house is plastered throughout with one coat of wood fiber plaster finished off smooth. This is cheaper than two or three coat plaster work and just as good. The walls are left unpainted when new and painted after soiled from occupancy.

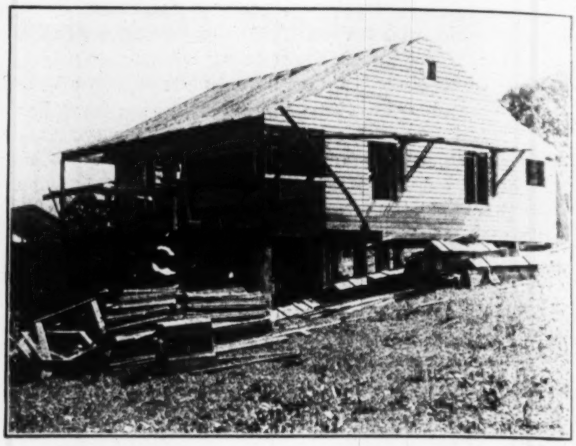
The house is of frame construction throughout, with yellow-pine novelty siding, double floors of either yellow pine or native hardwood and paper between, redwood doors, and concrete or native stone foundation posts. The frame is of hemlock and the roof sheathing of native hardwood covered with Carey Ready roofing, or asbestos shingles. All of the houses are painted forest green with buff trim.

From a construction standpoint, the only difficulties were those entailed by the scarcity of labor and shortage of materials. One man was continually employed in searching for and shipping in laborers of all classes, and as a further aid in this direction particular attention was paid to the proper housing and feeding of the employees. Board and lodging was supplied at $5.95 per week, which was below cost, but the loss on the camps was considered good policy and productive of better results than would be obtained by the expenditure of a like sum in higher wages.

An average of 100 men was employed at each of the three sites, Roaring Creek Junction, Bower and Gilmer, and an average of two houses was constructed per day. A considerable portion of this force was employed in cleaning, grubbing, road grading and ditching. The men were organized into gangs for different purposes, one gang at each site cleaning and grubbing, one building roads, one installing foundations, one erecting the house frames, one on siding, sheathing, etc., one lathing, one plastering, one installing trim, one painting, one installing sewers and water lines, and so on. In effect, each gang was of such size and so spaced with reference to the one following that several days' work intervened and there was little overlapping or interference, and yet a healthy rivalry existed. The same sort of rivalry was established between the work at Roaring Creek Junction and Bower; these two groups of houses being of about the same size and having been started on virtually the same day. The superintendent of each site knew daily the progress at the other and each endeavored to excel.


10" Filler Boards tacked in Place from Outside
Nails left to be readily pulled
Cleat
Cleat
2"x4"
10"
2"x4"
Top of Pier
Grade
Top of Pier
Cleat
10"
1" Filler Boards, 10" long
2"x4"
6'-0"
20"

REUSABLE WOOD FORMS FOR 10-IN. CONCRETE PIERS



FRAME "COMPANY HOUSE" UNDER CONSTRUCTION

To maintain further a definite schedule, a chart was devised before beginning operations, which chart showed the projected schedule of time of beginning and time of finishing each class of work. On this chart was plotted daily the actual work accomplished, thereby showing at a glance which classes of work were ahead or behind the class of work preceding or following. The various gangs could readily be augmented or diminished so as to make the whole work progress uniformly and without friction between the various gangs.

One thing which contributed to the speed was the use of a central sawmill where every piece of timber was cut to template to standard and exact size. These pieces were marked and piled according to size. From these piles the material was transferred to the house sites and erected by labor less skilled than would be necessary otherwise, and in less time.

Another detail which saved time and material was the design of the foundation concrete forms. The accompanying drawing shows this design, which permitted of the minimum number of forms being required, and also was readily adjustable to the variations in pier height. The concrete could be stripped while comparatively green, no wire or rods being used in the forms and virtually no nails to hold the short cross-boards. The forms were made up in standard lengths of 2, 4 and 6 ft. The side pieces were tacked on, with projecting nails to facilitate drawing, to the required pier height. Concrete was then poured and when set the forms were stripped by pulling nails and releasing side pieces, after which the cleats could be knocked off and the forms would fall away. Each set of forms was used about 15 times and were still good at the end of the work.

The large increase in industrial activity in the United States since the beginning of the war and the attendant shortage of labor have directed the attention of owners and operators to the better housing of their employees. With labor rates increasing rapidly and with competition in the obtaining of labor on the part of employers reaching a point where all sorts of unprecedented inducements are being offered to obtain and to *hold* help, many operators have deemed it economical to gain greater control over their employees through the establishment of "company houses." In many cases, the rapid expansion of industrial enterprises has been such that the available supply of privately owned houses has not been sufficient to meet the demand, and no choice has been left the operators but to build houses of their own. In other cases, the building of new plants, and the opening of new mines in locations where no housing facilities previously existed, made the same course necessary.

This was the situation which led to the building of the houses described. But in many other cases the underlying reason which impelled the owners to establish their own groups of houses has been the desire to provide housing facilities which would be designed for and suited precisely to the particular class of labor employed; to provide houses which would attract labor; to provide houses at rentals which would be lower than possible under any other system; and in some cases to induce the employees to buy their homes under the installment plan—but at all events the ultimate object was the assurance of a steady source of labor, content because comfortable and under control because situated adjacent to the plant. Another consideration, of course, has been the elmination of objectionable institutions in these colonies, the forms of amusement and the educational facilities being under control; the result being an improvement in the work done through improvement in the morale of the men themselves. Whatever have been the reasons leading to the growth of the custom of building "company houses," the fact is that such growth has reached proportions which lend wide interest to the study of the design and construction of such houses.

One of the present tendencies in manufacturing plants is toward the multi-family house, the two family and four-family types being popular. Where manufacturing plants are situated near cities of some size, and where land is costly, the multi-family house is cheaper in first cost per family, both as regards the cost of the land and also as regards the cost of the house. In other words, more families can be housed per acre in two- and four-family houses than in single houses. Also, the cost of a two-family house is not double that of a single house. At the same time, these multi-family houses can be made very comfortable as well as attractive in appearance, and they have some advantages in the cost of maintenance, heat being cheaper per family, for example.

However, the single house has certain decided advantages. Where the topography is rough, as was the case with the single-type houses illustrated, the single house is more flexible and can be fitted to the ground more easily than can the multi-family house. Where it is desired to sell the house to the tenants, transfer of title can be arranged more simply with the single house. The question of gardens and yard space arises when building multi-family houses, particularly in the case of four-family houses, the two upper families being without these desirable adjuncts to a home. The same question arises in the matter of cellar space. But of greatest importance of all is the fact that friction often develops among the families in multi-family houses, and the quarrels which occur among two or more families living under the same roof considerably discounts the benefits of the entire "company-house" system. Wherever practicable, the single house should be built, with the idea of encouraging each family to take pride in the neatness and appearance of its own surroundings.

The work at Roaring Creek Junction and Bower was done under the general direction of G. B. Southward, chief engineer of the West Virginia Coal & Coke Co. and under the supervision of A. E. Finley, superintendent of the McCaa Coal Co., at Gilmer. R. H. Chambers, vice-president, had general charge and L. E. Frissell was local manager for the contractor, the Jarrett-Chambers Co., Inc., New York City.

Two Methods of Maintaining Gravel Roads in Maine

Density of Traffic Is Criterion—Chief Reliance Is Placed on Annual Tar Treatment—Frost Is Worst Enemy

IN ORDER to illustrate the two general methods of maintenance of gravel roads employed by the Highway Commission of the State of Maine, I have selected two state highways which may be considered typical with respect to the amount of traffic carried and the methods followed, said Paul D. Sargent, chief engineer of the commission, in a paper read before the recent meeting of the American Association of State Highway Officials, from which the following has been abstracted.

It should be understood that the methods to be described have application to first-class gravel roads on which the subgrade has been carefully built in accordance with the highest type of specifications, and subdrainage and surface drainage provided at every place where the need seemed apparent. The surface is constructed in two courses very much in the manner of a a waterbound macadam road, except for the substitution of gravel for the crushed stone. The maximum diameter of stone in the bottom course is 3 in., varying from that size down to ¼ in. This course after rolling is 3 in. thick. The top course is constructed of material varying in size from 2 in. to ¼ in., the layer being 4 in. in thickness after rolling. While this specification has been slightly modified since 1914, the remarks which follow would apply equally well to either this or the more recent type of construction.

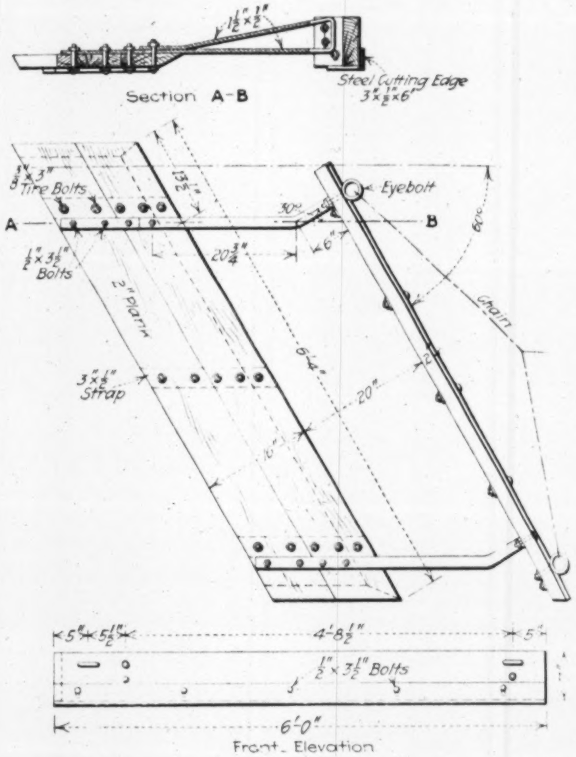
On State Highway "A" Kennebunk, the traffic for the four summer months amounts to an average of over 1200 vehicles per day, and on Sundays and holidays this is increased to between 3000 and 3500. This stretch of road has been maintained for the past three years by early patching and dragging, and shaping with gravel—the work beginning as soon as the snow has left the ground, and about the middle of April the surface of the road has softened up so that this can be done satisfactorily. About May 20 the road, prepared by sweeping with a horse sweeper and hand broom to remove any loose particles of dirt or dust, receives an application of Tarvia-B at the rate of about $\frac{4}{10}$ of a gal. per sq. yd. of surface. While formerly the tar was allowed to penetrate undisturbed for about half a day, now the traffic is so heavy that it has become necessary immediately to follow the application of the tar with a light covering of sand spread at the rate of 1 cu.yd. to about 100 sq.yd. of treated surface.

This method of surface treatment was originally used in 1915, the first application amounting to about $\frac{3}{10}$ of a gal. per sq.yd., being made between May 20 and June 30. This was followed with a second application about the middle of August which amounted to about $\frac{2}{10}$ of a gal. per sq.yd. Since the first year the treatment has been confined to one application of Tarvia-B spread at the rate of $\frac{4}{10}$ of a gal. per sq.yd. as soon after May 20 as weather conditions will permit.

The work of preparing the surface for this treatment, as well as the delivery and application of the sand, is carried out by labor employed by the commission. The superintendent of maintenance controls the amount of tar used, varying it from section to section of the road as circumstances demand—though, until this year, the tar has been applied by the concern from which it has been purchased. This control over the rate of application is very important, since in places where the drainage and surface conditions are perfect the continuity of the surface remains unbroken throughout the winter, and in the spring requires sometimes as little as ⅛ or ⅙ of a gal. per sq.yd. This condition is unusual, however, since most of the surface begins to break up soon after freezing and thawing begins in the fall, and is completed soon after the snow leaves the ground in the spring—the tar crust breaking up into scales of perhaps ¼ to ½ in. in thickness, and from 1 in. to 1 ft. sq. in area.

This factor comprises the really difficult part of gravel road maintenance. Experience has shown that frequent dragging, undertaken as early as is possible and while there is still more or less moisture in the scales, produces the best results. Several miles of gravel surface carried through three successive seasons in the above manner have proven it satisfactory.

While in general the surface begins to iron out in three or four days, though of course this is dependent upon weather conditions, any pockets of dust or soft places in the gravel surface will precipitate immediate disintegration and call for attention from the patrolman. If this condition is noticed as soon as it becomes manifest, a slight amount of tar applied with an old broom will prove a sufficient remedy, but if it is allowed to continue for even a little while, the patrolman will find it necessary to fill the hole with a mixture composed of 1 gal. of tar to a cu.ft. of sand.



MAINE HIGHWAY COMMISSION HAS DEVELOPED LIGHT ROAD DRAG TO HIGH EFFICIENCY

A similar type of disintegration is frequently noticed at the side of the road, where, on account of traffic turning out, the mat will often crumble and require patching with the mixture of sand and tar referred to above.

Where gravel roads carry a traffic of from 200 to 500 vehicles per day during five or six months in the year, and where the maximum traffic amounts to about 650 per day, no bituminous material is used in maintenance—entire reliance being placed on the work of a patrolman, who, with one horse, a drop-axle wagon, a light drag and ordinary small tools, is expected to take

WEIGHT OF TRAFFIC IS REFLECTED IN COST OF MAINTENANCE

	STATE HIGHWAY "A" KENNEBUNK			STATE HIGHWAY "D" WALDOBORO		
	2.74 Miles of Gravel Surface Treated with Tar			7.09 Miles of Gravel Surface		
	1915	1916	1917	1915	1916	1917
Patrolman's wages	$209.81	$329.16	$417.53	$546.98	$529.17	$627.69
Extra help	91.28	624.57	450.59	89.19	463.25	1,227.56
Material	1,036.99	1,309.49	1,250.68	00.00	51.42	180.94
	$1,338.08	$2,263.22	$2,118.80	$636.17	$1,043.84	$2,036.19
Inspection	25.10	182.03	175.00	7.67	18.57	30.00
Total cost	$1,363.18	$2,445.25	$2,293.80	$643.84	$1,062.41	$2,066.19
Cost per square yard	.053	.095	.088	.0096	.016	.03064
Cost per mile 16 ft. wide	497.51	892.43	837.15	90.80	149.84	291.42
DISTRIBUTION OF COST						
Cutting bushes	$00.00	$26.82	Date not distributed	....	$5.76	....
Dragging	112.28	67.54		$208.74	153.15	....
Raking rocks	16.38	21.70		180.77	75.11	....
Cleaning ditches and culverts	24.00	24.67		177.86	39.93	....
Repairing endwalls and culverts	8.12	82.10		....	....	....
Repairing guard rails	0.00	7.59		....	....	....
Surfacing gravel	23.19	534.91		68.80	767.01	....
Surface treatment: Tar	1,154.11	1,494.39		....	....	....
Bridges	0.00	3.00		....	2.88	....
Total	$1,338.08	$2,263.22		$636.17	$1,043.84	....

care of from six to eight miles. As soon as the snow has left the ground the patrolman begins dragging the softened surface, raking off loose rocks and patching depressions with gravel which has been distributed along the sections at about every 1000 to 1500 ft. This patrolman must also keep ditches and culverts clear, make necessary repairs to end-walls and guard rails, and keep the weeds trimmed off the shoulders and the sides of the road.

Roads maintained in this manner require resurfacing about every two years. Gravel passing a 1⅜-in. screen, and which is similar in every respect to maintenance gravel, is spread at the rate of 1 cu.yd. per 100 sq.ft. This work is not undertaken until traffic has begun to lessen after Labor Day, and it is generally completed before Nov. 15. No roller is used on this work, dependence being placed on traffic and the attention of the patrolman who constantly uses his drag to shape the new layer while it is consolidating. Very frequently consolidation is not effected until after the first frost and the section has been dragged a few times in the spring. After this the new material has become thoroughly bonded to the old surface and to all intents forms a new gravel road.

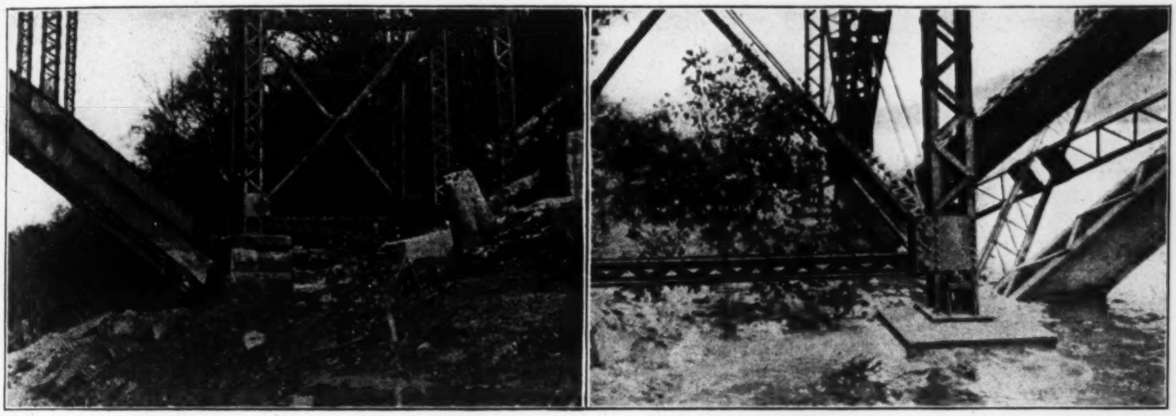
Quite extensive resurfacing operations were undertaken during the winter of 1916-1917. Men and teams are more available at that season of the year, and it was also found that teams could haul from 2 to 3 yd. of gravel at a load, as against 1¼ to 1½ yd. if wagons were used instead of sleds. The gravel was delivered in windrows on one shoulder of the road and, as soon as the snow left, it was dragged to the roadway with a road machine. Taken as a whole, this method of handling the surfacing has proven very satisfactory, and it is planned to repeat the use of the method during the present winter.

During the coming season we expect to combine three or four patrol sections and furnish the men with a 1-ton tractor, five of which have been purchased. This rearrangement will result in a gang of three or four men who will have charge of from 18 to 25 miles of road. It is believed that this arrangement will prove more economical than our present plan of employing four men, four horses, and four sets of equipment for a similar length of road.

Protecting Submerged Steelwork of Arch Bridge

Ends of Steel Arches Submerged by Government Dam To Be Protected by Enclosure Wall and Encasement with Pitch

THE building of the government dam between St. Paul and Minneapolis, described in *Engineering News-Record* of Oct. 4, p. 628, has raised the water in the Mississippi River over the tops of the piers of the Marshall Ave.-Lake St. bridge. The steel of the arches will be submerged about 5 ft.; in extreme high water the submergence will be at least 12 ft. This bridge is a two-span pin-connected arch bridge having 456 ft. three-hinged steel arches, flanked by short shore truss spans. It connects two arterial streets in Minneapolis and St. Paul and carries one of the interurban car lines between the two cities.

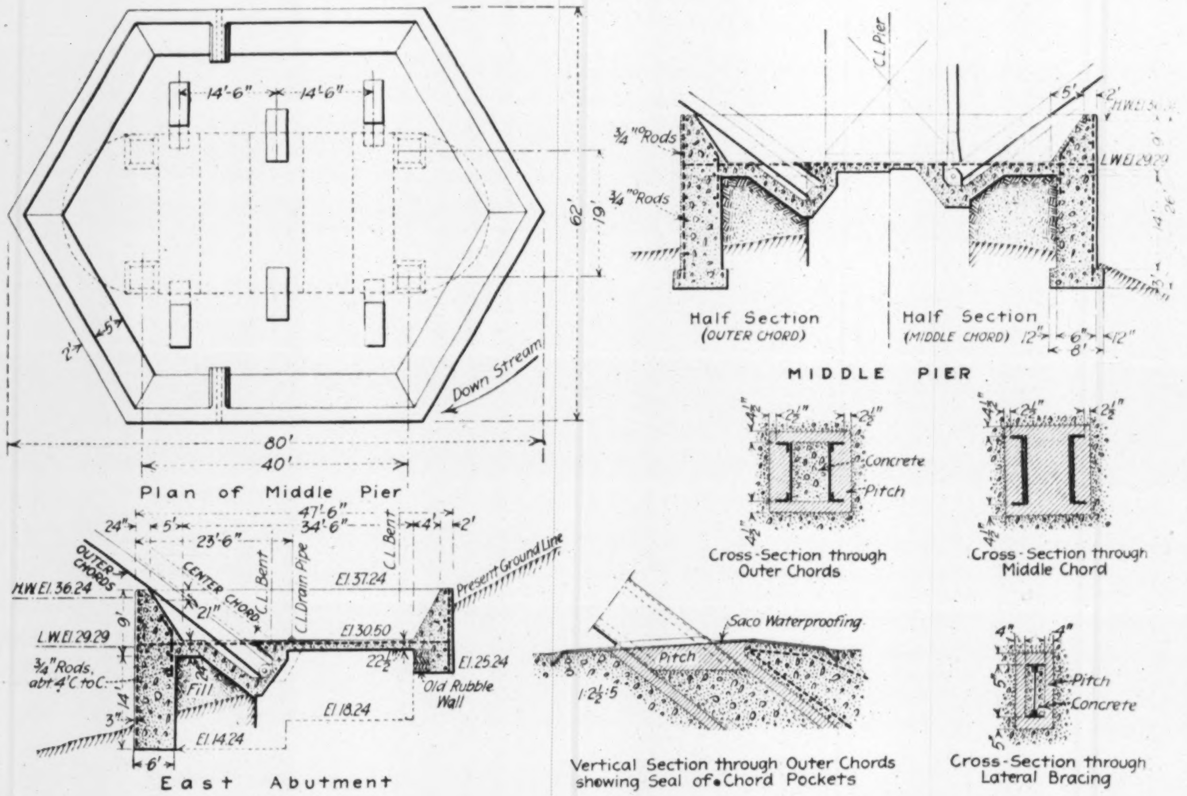


END OF ARCH FORMERLY WELL ABOVE WATER IS NOW SUBMERGED

The submerged steel is to be protected by building concrete protection walls around the shore abutments and the center pier to a point 1 ft. above the estimated high water. Within and partially supported by these walls there will be a reinforced-concrete slab built over the top of the present masonry, just above normal stage of water due to the dam, with pockets built of concrete for the arch ribs and laterals. These pockets will be filled with a bituminous putty of such consistency that the arches will remain free to adjust themselves under different loadings or temperature stresses without cracking the bond between the steel and the protecting putty. The slab floor will be finished with a 1-in. mortar surface sloping away from the steel toward the outlet valve.

The retaining wall will be about 7 ft. higher than the slab floor and will act as a protection to the arches from floating drift and ice in high water. Rainwater caught in the inclosure will drain off through weep holes and valves, as will also water coming into the inclosure during periods of high water. It is the intention to allow the water to rise in the basin to the same height as outside, depending on paint to protect the steel above the sealed pockets. If this is not satisfactory, the valves may be closed during high-water periods and the inside of the basin waterproofed. Also, the valves may be closed at any time during a high-water period and the water pumped out if it is found necessary to inspect or repair the steel.

All steel below 4 ft. above high water is to be cleaned by sandblast and painted with Sarco metal primer and then with Sarco mineral-rubber pipe coating No. 6. The inside of the concrete pockets will be painted with Sarco concrete primer, and after the bituminous putty is placed (hot) the top of the pockets and the surrounding concrete is to be sealed with waterproofing compound. Rod or wire-mesh reinforcing will be used in the thin concrete sections forming the pockets. The space to be filled with putty will be decreased by filling in the interior of the steel arch chords and around the shoes with concrete where it is practicable to use this method.



Plan of Middle Pier

East Abutment

Half Section (OUTER CHORD)

Half Section (MIDDLE CHORD)

MIDDLE PIER

Cross-Section through Outer Chords

Cross-Section through Middle Chord

Vertical Section through Outer Chords showing Seal of Chord Pockets

Cross-Section through Lateral Bracing

MAIN DETAILS OF PROTECTION OF SUBMERGED STEELWORK, MARSHALL AVE.-LAKE ST. ARCH BRIDGE

At the center pier this protection will form an island basin 62 ft. wide and 80 ft. in extreme length. The abutment structures will be 60 x 47½ feet.

The dam is now unwatered to allow the construction of the protection work to proceed. The contract for the east pier has been let to Thornton Bros.., of St. Paul, for $9873. Specifications are now being prepared for a joint contract to be let by the two cities for the work on the center pier.

This work was designed and is being executed, under the supervision of Oscar Claussen, chief engineer of St. Paul, by M. S. Grytbak, bridge engineer. M. N. Goss is Commissioner of Public Works of St. Paul. Frederick W. Cappelen is city engineer of Minneapolis.

Motor Trucks Beat Trains in Troop Movement

The recent army truck test over the Dixie Highway between the cantonments at Atlanta and Chattanooga, to determine the speed with which troops can be moved in an emergency by motor truck, in comparison with the known rate of travel by cavalry or railroad, proved to be a revelation in showing the higher speed of motor trucks as compared even with express train service.

Army officers were greatly interested in the White truck with a special "Col. Gallagher" troop transport body. Six trucks of other types, carrying regimental supplies, participated in the test and the whole demonstration was closely watched by several French and American army officers, among whom was Lieut. Col. Hugh J. Gallagher, depot quartermaster at Atlanta and designer of the Gallagher body.

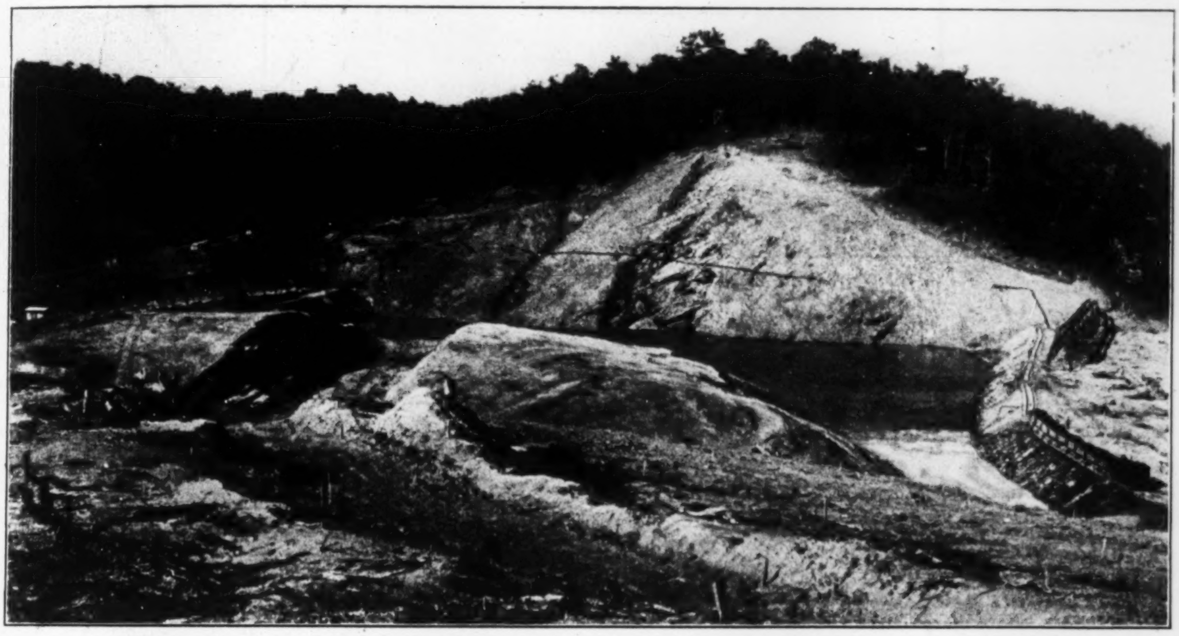
The transport covered the route in 5 hr. 30 min. on the outbound trip and 5 hr. 2 min. returning, beating the time of the fastest railroad train between the two points. The six supply trucks required eight hours or more. At times the speed of the transport was as high as 49 miles an hour. Colonel Pierce said the test showed that a whole regiment could be moved over the route in seven hours. The Gallagher body design seats the soldiers back to back lengthwise of the body. The rifles may be stored in rifle chests built between the backs of the seats.

The new transport is expected to eliminate baggage wagons to a large extent inasmuch as lockers under the seats carry equipment and ammunition.

Five Million Yards Moved To Dam Three Rivers

Structure for Bridgewater (N. C.) Development Built by Hydraulic Filling Between Outside Embankments—Flow of Two Watersheds Diverted on Third

THREE large earth dams and two diversion channels, to store water on three rivers for operating a power house near Bridgewater, N. C., are being built by washing the central portion of the fill to place between outside embankments formed by dumping dry material from trestles. All of the earth is dug by steam shovels, the material for filling the center portion of each dam being dumped by train and washed to place with hydraulic giants supplied with water by pumps mounted on a float in a pool between the outside embankments. The level of the pool is raised as the filling progresses, the barge having to be dismantled at the top of the dam. The spillway structure, located in the southerly dam, requires 200,000 yd. of concrete, for which a crushing and mixing plant using local rock has been set up. The work is being handled in two sections, each with its own plant and organization, one including the southerly dam with a spillway, and the larger diversion channel, and the other including the second and third dams, the power house and a 700-ft. rock tunnel supplying it from the northerly reservoir. The plant for handling 5,850,000 yd. of fill required includes 25 locomotives, 150 to 180 dump cars and 10 steam shovels.



MATERIAL DUMPED INWARD FROM FLANKING TRESTLES IS SLUICED TO PLACE AT BOTTOM OF POND BY PUMPS ON RAFT

As will be seen from the map, the three dams under construction will store water in a very irregular area comprising parts of the basins of the Catawba River, Paddy Creek and the Linville River, a few miles above the point where these three streams join. Paddy Creek is to be entirely cut off. The water going over the main spillway will pass down the present bed of the Catawba River. Although the site of the development is in the mountains, it was possible to cut through the low divides separating the three basins at this point, and throw them into one reservoir. The principal cut required is for the diversion channel between the Catawba and Paddy Creek water sheds, and involves about 500,000 yd. of excavation, while only 50,000 yd. will have to be removed between the Paddy Creek and Linville River basins.

In addition to the Catawba River structure, a small concrete dam just north of that river valley, two similar structures between the Linville River and Paddy Creek, and a fourth low dam north of the Linville River, will provide additional spillway capacity, wasting into the Catawba and Linville Rivers. These dams, all of small height and ranging in length from 100 to 200 ft., have not yet been started.

The spillway of the Catawba dam will be about 165 ft. high at the highest point, about 175 ft. thick at the base and 300 ft. long, with a long wing wall on each end. There will be a steel bridge to span this spillway 20 ft. above the crest of the dam and a reinforced-concrete bridge connecting with earth fill on the north end. A surfaced dirt road will be built across all the dams and around the reservoir connecting with Bridgewater and Nebo.

The Catawba River dam, including 150,000 yd. of fill in a notch through the valley wall at one end, will require 2,300,000 yd. of material, and is the largest of the

START OF WORK ON BIG SPILLWAY

main earth dams. Its top elevation will be 1220 ft. above sea level, the average elevation of the present ground surface along the river being 1090 ft. The Paddy Creek dam will contain 1,600,000 yd. of fill. and 1,800,000 yd. of material will be required for the structure across the Linville River. These figures do not include 10% extra material which the contractor is required to place to allow for shrinkage.

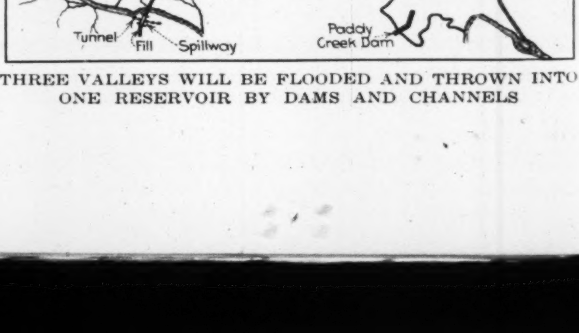
Each of the three large earth-fill dams is being made in 7 lifts, each about 20 ft. high. These lifts are made by dumping material to form an embankment along each side of the dam from dirt trains run out on trestles. The trestles for each successive lift are stepped in to give the required slope on the outside of the fill. These external embankments are about 50 or 60 ft. wide on top. After the central portion of the dam is inclosed to make a pond by these fills, material is dumped from one of these embankments at any point where it is convenient for the floating pump in this pond to work. This pump rehandles the material, distributing it by washing over the central area. The ponds are kept full by pumping from the rivers across which the dams extend. Sufficient water is supplied to keep the barge afloat and to prevent too wide a beach forming at the base of the dikes. This water varies in depth, being sometimes 30 ft. deep at the deepest point.

The equipment used to sluice the fine material to the middle third of the dam consists of three-stage centrifugal pumps driven by 300-hp. motors. These pumps, which furnish 2000 gal. per min. with a nozzle pressure of 175 lb., are situated on barges within the pond inclosed by the dikes. This pond water is used over and over again. Electric current is carried to the barges by means of a three-ply insulated cable supported by barrel pontoons, thus making it possible to move and anchor the barges at any desired position in the pond. The fine material thus washed to the middle third forms an impervious core and leaves an outer skin on both slopes of the dam, of coarse earth and rock. The fill deposited in this way is more thoroughly segregated, it is asserted, than by any other process. As the material used is clay and sand, a very dense and impervious center is being secured. The upper slope of each earth dam is to be 1 on 3, the lower slope 1 on 2½, and the slopes are to be riprapped from 1 to 3 ft. thick with stone.

Even at the Catawba River dam, where the excavation from the diversion channel into the Paddy Creek basin was available, most of the fill for the dams had to be borrowed. At the Catawba River dam, three steam shovels, 11 locomotives and 75 dump cars are required in excavating the diversion channel, borrowing material and making fill for the dam. In addition, a fourth shovel is at work on the foundation for the spillway, and an American crane shovel has been employed in grading for the railroad tracks. The track system connects with the Southern Railway near Bridgewater.

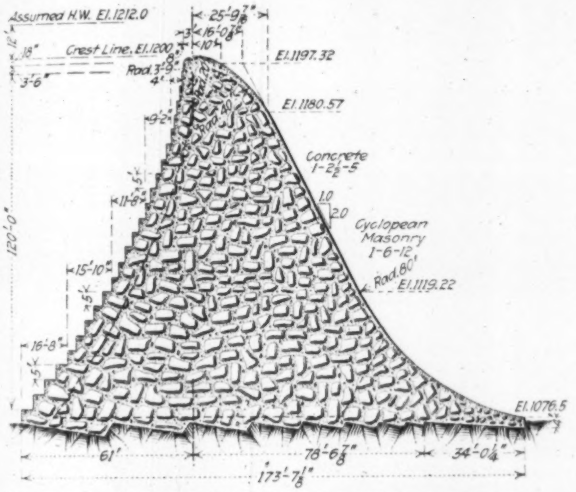
At all three of the dams central cut-off trenches are carried down to rock. These trenches extend across the river bed and up the hillside on both banks of the stream. Owing to the steepness of the banks, they were excavated by sluicing the material from the hillsides down into the bed of the river, whence the material was moved by steam shovels. The Catawba dam is located where the bed of the river is very broad and flat, and the rock is overlain by a bed of large gravel to a depth of about 5 ft., above which is a stratum of soil about 20 ft. in depth. This soil was too boggy to hold up a steam shovel and was removed by digging a small sump hole, pumping it full of water and then floating a dredge boat therein. Water was supplied to the dredge by two centrifugal pumps from the river. This dredge with a centrifugal pump and cutter head removed substantially all of the soil stratum, discharging through a pipe line into the river. The gravel was taken out by a steam shovel after the dredge had been removed and the trench excavated by it drained into the river.

In addition, the bed of the river is to be unwatered at the Catawba River dam in two successive crib cofferdams, and a concrete spillway structure containing 200,000 yd. erected on solid rock. A bend in the river was first partially cut off by a straight crib cofferdam, the water passing to the south, and the larger portion of

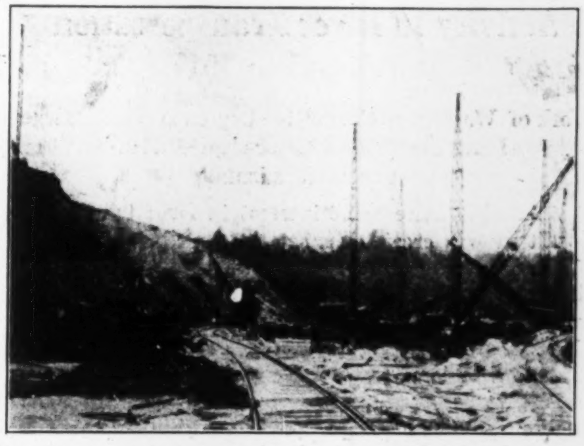


THREE VALLEYS WILL BE FLOODED AND THROWN INTO ONE RESERVOIR BY DAMS AND CHANNELS the spillway foundation to the north being pumped dry. A steam shovel was carried into this hole on a spur track, and used to load the excavated material. It is assisted by a number of large steel guy derricks of the type used by the same contractor on the Yadkin River development. These derricks, of which 17 will be set up at one time on the Catawba dam, will be used to handle all the concrete placed in the spillway section. These derricks have 115-ft. masts and 100-ft. booms and are of 20 tons capacity. The dam is so high above the foundation that two set-ups of the derricks will be necessary to complete it. The dam will be built up as high as the derricks will reach from their first set-up, recesses being left in the downstream slope to erect timber bents on which to set the derrick for the second stage of the work. The concrete will be delivered along the downstream face of the dam in 2-yd. buckets on flat cars.

The plant for mixing this spillway concrete, located downstream from the dam on the north side of the river valley, will employ sand and stone obtained locally, the stone being quarried upstream from the dam on the south side of the river. The plant consists of a pair of 2-yd. mixers surmounted by loading bins for stone and sand. These mixers discharge in buckets on flatcars on a track extending past the south side of the plant. Across this track, above the level of the trains the cement is carried to the charging platform on a belt conveyor. With this arrangement it is not necessary for the cement cars to be switched onto or across the tracks which are used for handling the concrete. Behind this mixing plant are four secondary crushers, to the north of which in turn is the primary crusher, supplied with stone brought by rail from the quarries. The large crusher is a 21K Allis-Chalmers gyratory, and the smaller ones are No. 5 McCullys.



MAIN SPILLWAY REQUIRES LARGE YARDAGE OF MASONRY



STEAM SHOVEL DIGS CUTOFF TRENCH AT PADDY CREEK

The Paddy Creek dam, not requiring any concrete structures, was constructed rapidly and will soon be completed. The Catawba River structure, on the other hand, could not be carried above the first lift until the spillway was well started. While making the flanking fills for this lift and constructing the cofferdam for unwatering the major portion of the spillway site, the small dam to the south of this structure was completed. At the same time a start was made on excavating the diversion channel north of the dam. At the Linville River site it was necessary to complete the power house and the tunnel in order to by-pass the river, before the main fill could be carried very far. This tunnel, which is partly in solid, partly in disintegrated rock, is 25 ft. in diameter and 700 ft. long. It is lined with concrete through the solid rock portion and with reinforced concrete through the disintegrated rock. A steel penstock of 1-in. thick metal and 20 ft. in diameter extends from the power house back into the tunnel for about 300 ft. through the disintegrated rock. The concrete in this tunnel was poured from a car for the floor and part of the side walls, and with a pneumatic mixer for the roof, and for the entire section in that part of the tunnel through which the steel penstock extended. Exceedingly good results were realized in spite of the many obstacles encountered.

The power house is a reinforced-concrete structure. It will contain two turbines operating under 140 ft. head, and will have a capacity of 26,400 hp. The power house structure is virtually completed, and the tunnel was finished in July. This made it possible early in October to divert the Linville River and begin construction of the dam proper.

The concrete work and a major portion of the earth work is being carried out by the Hardaway Contracting Co. for the Western Carolina Power Co., which owns and will operate the development. The diversion channel between the Catawba River and Paddy Creek basins is being excavated under subcontract by A. J. Twiggs & Sons. The entire work employs about 2000 men, 1200 of which are in Camp No. 1 on the Linville River, and 800 in Camp No. 2 on the Catawba River. Both camps are in charge of S. T. Jones, general superintendent for the Hardaway Co. The Western Carolina Power Co., of which W. S. Lee is vice president and chief engineer, is represented by F. H. Cothran, resident engineer.

Speed in Locomotive Building

The Baldwin Locomotive Works, Philadelphia, recently announced the completion of a locomotive built in 20 working days. The engine was one of a number ordered by the U. S. Government for foreign service July 18, and the first one was completed Aug. 9.

Activity in River Transportation Developed in 1917

Work of Waterways Committee Begins To Tell—Barge Lines Starting on Mississippi—Attention to Terminals

MARKED increase of interest in river transportation was created during the past season by the efforts of a water transportation committee of the Council of National Defense. Active river shipping is in prospect for next season. The coöperation of the Shipping Board in the construction of steel barges, and the formation of local corporations to develop river terminals, give assurance with respect to two of the main factors on which river transportation will depend. Full coöperation by railways to develop the freight-carrying capacity of rivers is also counted on. This, however, will depend in part on rate adjustment.

The principal growth of interest has been in the Mississippi Valley. Capt. A. A. Poland, of the Quartermaster's Reserve Corps, has been assigned to the U. S. Engineer Office at St. Louis as representative of the water transportation committee. This provides a central point for contact between business men, capitalists and the interests concerned with barge lines and river terminals, on the one hand, and manufacturing interests dependent on regular and quick transportation service, on the other.

SOME MISSISSIPPI RIVER DEVELOPMENTS

To develop the possibilities of shipping pig iron from Alabama to Illinois, the Keystone Steel & Wire Co., Peoria, shipped by water from Florence, Ala., to Peoria during part of the summer. Barges were borrowed from the Pittsburgh coal fleet, and an 80-ft. canal, a mile long, was dug from the Illinois river to the company's plant. Pig iron was diverted from the all-rail route to Florence, and thence taken by barge down the Tennessee River and the Ohio, and up the Mississippi and Illinois. Two trips were made and a very distinct economy in transportation cost was shown, as compared with all-rail costs. The company is preparing to build boats and barges for next season.

A line of twelve barges, served by three towboats, is carrying bauxite from West Memphis to East St. Louis for the Aluminum Ore Co. The material is handled by a car dumper at West Memphis and loaded to cars by clamshell at East St. Louis. This service employs steel barges originally constructed for the American Steel & Wire Co. Return cargoes (partial) are secured through the Memphis Barge Line, which ships package freight downstream from St. Louis to Memphis, loading at the O'Fallon St. municipal dock by chutes and a locomotive crane.

Bulk-freight transportation by barge from St. Louis to St. Paul and return has recently been given a thorough tryout on a large scale, as reported in our news columns. The basis of this service is the movement of coal from the southern Illinois fields to St. Paul, and shipment of Lake Superior iron ore from St. Paul to East St. Louis. E. F. Goltra, of the Mississippi Valley Iron Co., and W. K. Kavanaugh, of the Southern Coal Mining Co., St. Louis, are actively engaged in the enterprise. The ore chute in the floor of the Terminal Railway bridge at St. Paul, described in *Engineering News-Record* of Oct. 4, p. 638, was constructed for the transfer of ore from railway cars to the barges.

For this barge service experiment, six barges were lent by the Mississippi River Commission. The trip north was made in two weeks, in the early part of August. Some delay was incurred in loading and unloading, but the return trip was started in the latter part of August. Overloading of the barges and low water in the river combined to create many delays; the trip down occupied six weeks. The tow picked up five additional wooden barges on the way, however.

The Kansas City-Missouri River Navigation Co., which has been operating nine barges and two towboats between St. Louis and Kansas City for seven years, had a very active season. This line operates on a five-day schedule, between a municipal dock in Kansas City and a private dock at East St. Louis. The terminals are equipped with conveyor and telpher. Steel double-hull barges are used in this service. Freight claims amount to less than ½%. The company offers through rates with railroads and can issue foreign and domestic bills of lading. Its rates are materially below rail rates. The docks have rail connections. No bulk freight is carried. Package freight—the most costly class to handle—is loaded and unloaded for $1.10 per ton, which with switching charges makes a terminal cost of $1.40 per ton. Unusually low water stopped this traffic late in October, a few weeks earlier than in normal years. The barges are expected to go into service between St. Louis and New Orleans.

An Illinois River barge line is to be formed, through the activity of business men in the Illinois valley. There is a big downstream business available along the river, including large tonnages of sand. The Illinois Valley Manufacturers' Association, with headquarters at La Salle, Ill., is active in promoting the enterprise.

TERMINALS TO BE BUILT OR BUILDING

The St. Louis municipal dock, a reinforced-concrete wharf with elevators and conveyors to handle freight at all stages of the river, is under construction and is likely to be well along toward completion next season.

Memphis, Tenn., has issued $500,000 bonds for the erection of a river terminal. The city's engineers are now actively engaged in planning this terminal and expect to begin building at once, so that the structure will be completed by next spring.

A terminal is being built at Alton, Ill., by the Illinois Terminal Ry. for Mississippi and Missouri River freight traffic. The city of Davenport, Iowa, is also developing a terminal. It has built a seawall on the harbor line in front of the city, and by filling in behind the wall has reclaimed 40 acres of valuable land, which will be utilized to build up an industrial district with a river terminal along its edge. Loading and unloading devices are to be installed. The first unit is about completed, including a concrete and brick freight warehouse. (See *Engineering News-Record*, June 7, 1917, page 481).

A similar terminal is being completed at Muscatine, Iowa. Here an electric conveyor, an electric crane, and a marine leg for loading and unloading bulk grains will be installed, making this one of the most complete terminals on the Mississippi River.

At Moline, Rock Island, Quincy, Clinton and Hannibal committees are at work selecting sites and planning water terminals, Dubuque has spent $5000, and Keokuk has plans for a terminal, with every prospect that work on these will go ahead.

The cities of St. Paul and Minneapolis, each of which has constructed a municipal dock, are planning for the installation of freight-handling machinery. The Minneapolis dock at present has no equipment, while the St. Paul dock uses a derrick in place of the locomotive crane it was originally intended to use.

On the Illinois River, Peoria and La Salle are entering upon the construction of terminals. Peoria is likely to undertake terminal construction as a municipal enterprise, for which bonds are to be issued by the city. The La Salle project will probably be undertaken by local business men.

All these terminals will have direct railroad connection, this coördinating rail and water transportation.

The present activities on the Mississippi are largely concerned with bulk-freight transportation. There is associated interest in package-freight service, however, similar to that operated by the Kansas City-St. Louis line and by the returning ore barges from St. Louis to Memphis. As such service depends on the general interest and participation of shippers of package-freight in the river cities, work is now centering on creating such interest.

Close consideration is being given also to the subject of freight insurance. It is considered satisfactorily demonstrated that river freight in steel barges is entitled to low insurance rates, especially because the Great Lakes shipping, which is much more hazardous, receives moderate rates. If the steel barges that will be available next season do not receive low rates from the existing insurance companies, it is probable that means for providing this insurance in river cities will be found.

As announced a month ago, the U. S. Shipping Board has undertaken the construction of some 36 steel barges for Mississippi River traffic. This action assures priority for the material required. The barges will be 48 x 300 ft. in size, with a capacity of 900 tons on 4-ft. draft.

American Export Cement Skillfully Packed

Grosvenor M. Jones, special agent of the United States at Santiago, Chile, has forwarded a report to Washington, stating that American cement deserves a high place on the honor roll on account of its good export packing. During a tour of the west coast of South America hundreds of barrels of American cement were seen, and with comparatively few exceptions they were in excellent condition when they arrived. Photographs which were taken recently at Santiago, Chile, of cement shipments, one lot from the United States and the other from Europe, furnished a contrast which was favorable to our shippers. The European lot was on a lighter alongside the dock. The heads of several of the barrels were broken in. The American lot seen on one of the docks revealed no such defects in packing. The barrels had a strip of board across each head, a protection which is always found on American cement packages but not on other barrels.

Syracuse Tests Two Methods of Sewage Treatment

Activated-Sludge Process Being Studied Alongside Dortmund Tanks Combined with Aerated Continuous Gravel Filters

IN SEPTEMBER, Syracuse, N. Y., added its name to the long list of cities which have installed experimental sewage-treatment plants. The activated-sludge process is being tested, as is also a combination of Dortmund settling tanks and artificially aërated continuous gravel filters, similar to those tested at New Rochelle, N. Y., in 1916, by James C. Harding, consulting engineer, New York City.

Before these two processes came to the front Imhoff tanks and sprinkling filters had been favorably considered for the treatment of the sewage of Syracuse. That method would have required a force main about four miles long and a relatively high pumping head. If one of the two processes now being tested proves satisfactory, the four-mile force main will be unnecessary, as it is believed that either of these processes could be operated near the terminus of the intercepting sewer.

GRIT CHAMBER, SCREENS AND DORTMUND TANKS

At the testing station, crude sewage is pumped to a grit chamber consisting of a long narrow box divided into two compartments to give a total channel length of 30 ft. The sewage then passes through a coarse screen of inclined bars, ¾ in. clear spacing, to an orifice chamber. Through one orifice the activated-sludge tank is supplied, and through two others the sewage passes to two Dortmund tanks. One Dortmund tank supplies settled effluent to a horizontal-flow and the other to a vertical-flow aërated gravel filter.

The activated-sludge installation embraces an aërating tank 4 ft. wide, 12 ft. long and 10 ft. sewage depth. Perforated diffusers extend transversely across the aërating tank in the bottom of V-shaped troughs. These pipes are 24 in. on centers, 1 in. in diameter, with $\frac{1}{16}$-in. perforations, 3 in. c. to c. The aërated sewage goes to a settling tank 4 ft. square, with a maximum water depth of about 15 ft., the bottom being hopper shaped, with slopes of 4 on 1. From this tank an air lift delivers the sludge back to the aërating tank or, if desired, to a reaëration tank, 4 ft. square, with a water depth of about 11 feet.

The two Dortmund tanks are each 3 ft. 7 in. square and 12 ft. deep.

HORIZONTAL- AND VERTICAL-FLOW FILTERS

Each aërated filter is 4 ft. wide and 8 ft. long, and is filled with gravel which has passed a ¾-in. screen and has been retained on a ½-in. mesh screen. The depth of gravel is 4 ft. in the horizontal-flow and 5 ft. in the vertical-flow tank.

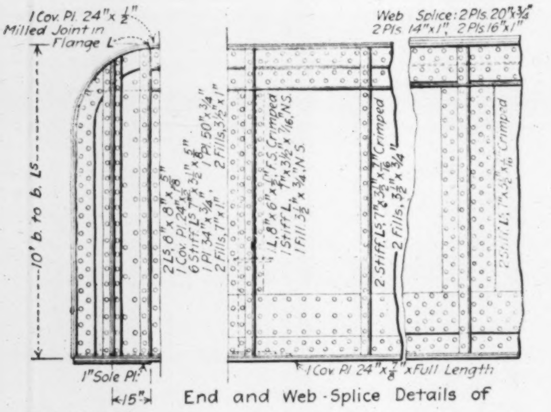
In the horizontal-flow tank the sewage is discharged through a manifold of 1 in. pipe perforated with ¼-in. holes. The sewage then flows longitudinally through the tank. The air pipes in this tank are laid in transverse ridges, 12 in. c. to c., having 1 to 1 slopes. These pipes are perforated with $\frac{1}{16}$-in. holes, 3 in. center to center.

The vertical-flow tank has 5 ft. depth of gravel. The troughs in the bottom are 6 in. c. to c., 3 in. deep, run transversely and contain, alternately, an air-supply and an effluent pipe. The air-supply pipes have $\frac{1}{16}$-in. and the effluent pipes ¼-in. perforations, all 3 in. center to center.

Both the horizontal- and the vertical-flow tanks are back-washed every eight hours with air, supplied from a storage tank. The pressure starts at about 50 lb. and diminishes until the air is used up. Air-washing takes about 2 to 4 minutes.

A low-pressure blower supplies air at from 6 to 8 lb. pressure for both the activated-sludge process and the aërated filters. Various rates of air supply are being tried in each process. It is too early to give comparative results. In general, both processes show promising results, but whether the gravel filters can be kept clean remains to be seen.

Glenn D. Holmes is chief engineer of the Syracuse Intercepting Sewer Board, and Jacob Cohen is engineer in charge of the testing station.


1 Cov. Pl. 24"x ½"
Milled Joint in Flange L
10' b. to b. Ls
1" Sole Pl.
15"
2 Ls, 8"x 8"x ⅝"
1 Cov. Pl. 24"x ½"
6 Stiff. Ls 7"x 3½"x ⅝"
1 Pl. 34"x ¾"
2 Fills, 7"x 1"
1 Pl. 50"x ¾"
2 Fills, 3½"x 1"
Web Splice: 2 Pls. 20"x ¾"
2 Pls. 14"x 1", 2 Pls. 16"x 1"
1 L, 8"x 6"x ½" F.S. Crimped
1 Stiff. L, 7"x 3½"x 7/16" N.S.
1 Fill 3½"x ¾" N.S.
2 Stiff. Ls 7"x 3½"x 7/16" Crimped
2 Fills, 3½"x ¾"
2 Stiff. Ls 7"x 3½"x 7/16" Crimped
1 Cov. Pl. 24"x ⅞" x Full Length

End and Web-Splice Details of Main Girder

Vertical Legs of Flange Ls cut for 8"x 8"x ⅝" End Stiffeners
Both Legs of Stiffener Ls have full Bearing

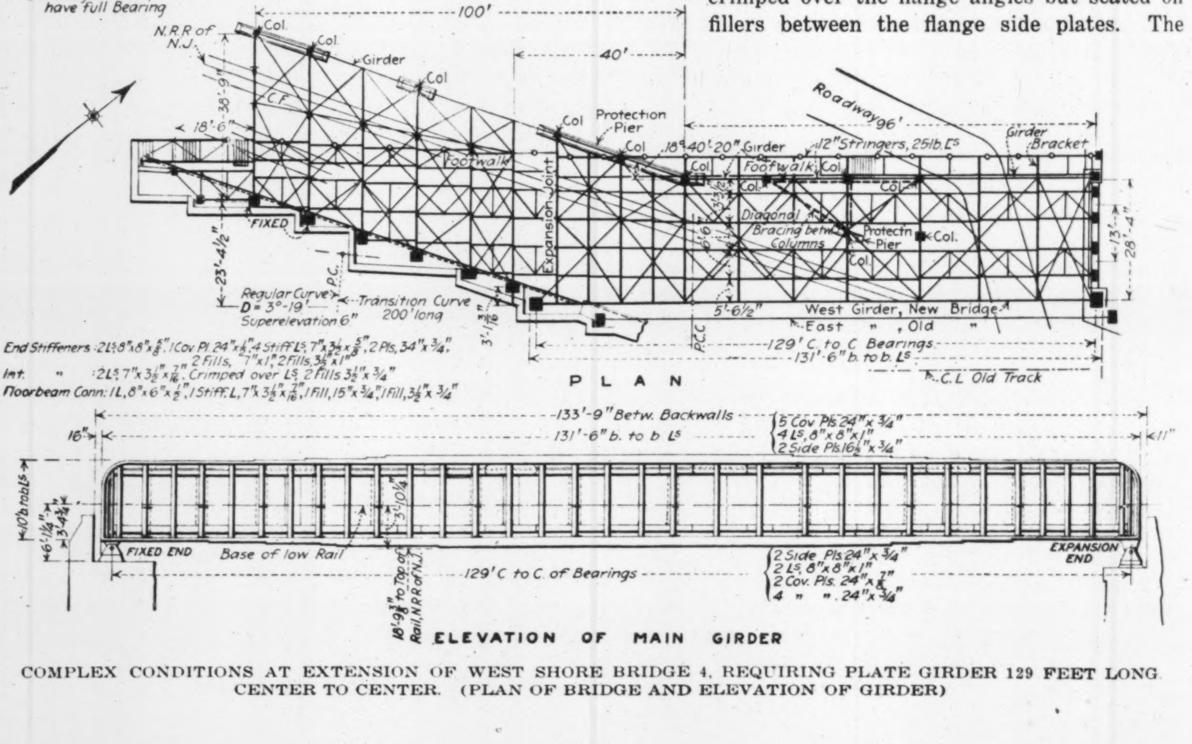
New York Central Sets Long Plate Girder in Bridge

Two Wrecking Cranes Place 105-Ton Member, 131½ Feet Long and 10 Feet Deep, in Complicated West Shore Crossing

THE New York Central R.R. now has on its West Shore line one of the longest bridge plate girders in existence. This is a girder 131½ ft. long over all, weighing 105 tons, which forms part of a complicated crossing over the Northern R.R. of New Jersey (an Erie line) near New Durham, N. J. It was set in place Nov. 11; two heavy railroad wrecking cranes handled the operation in simple and rapid style.

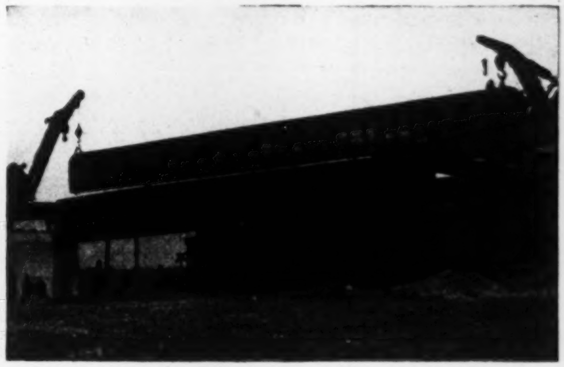
The West Shore Railroad now has under construction a short stretch of third- and fourth-tracking between the westerly end of their yard at New Durham, N. J., and the southerly end of the yard south of Little Ferry, a distance of approximately 1.6 miles. This involves duplicating most of the existing structures. The crossing over the Northern is on a very long skew, and is complicated by a highway at the lower level, which interrupts the line of the abutment and makes the new structure different from the old. The new structure, which lies west of the old, is carried on one side by a girder 129 ft. long c. to c. bearings, and on the other side by columns set outside the clearance width of the Northern tracks.

In design, the long girder is substantially normal, except for size. The web is 120 in. deep. The top flange is of four-angle section, but the bottom flange, where an extra line of angles would have interfered with the floor-beam connections, has only the usual angle pair of flange angles, but is fitted with six cover plates instead of five as on the top flange. The web stiffeners are 7 x 3½-in. angles (floor-beam connections 8 x 6-in), crimped over the flange angles but seated on fillers between the flange side plates. The


100'
N.R.R. of N.J.
Col.
Col.
Girder
Col
C.F.
38'-9"
18'-6"
40'
Col
Protection Pier
Col
18° 40'-20" Girder
12" Stringers, 25 lb. Ls
Roadway
96'
Girder Bracket
Footwalk
Footwalk
Col.
Col.
Col.
Col.
Expansion Joint
FIXED
23'-4½"
P.C.
Regular Curve D = 3°-19'
Superelevation 6"
Transition Curve 200' long
3'-1 3/16"
3'-3½"
5'-6"
Diagonal Bracing betw. Columns
Protectn Pier
Col.
Col.
13'
28'-4"
5'-6½"
West Girder, New Bridge
East " , Old "
P.C.C.
129' C. to C. Bearings
131'-6" b. to b. Ls
C.L. Old Track
PLAN
End Stiffeners: 2 Ls, 8"x 8"x ⅝", 1 Cov. Pl. 24"x ½", 4 Stiff. Ls, 7"x 3½"x ⅝", 2 Pls. 34"x ¾", 2 Fills, 7"x 1", 2 Fills, 3½"x 1"
Int. " : 2 Ls, 7"x 3½"x 7/16", Crimped over Ls, 2 Fills 3½"x ¾"
Floorbeam Conn.: 1 L, 8"x 6"x ½", 1 Stiff. L, 7"x 3½"x 7/16", 1 Fill, 15"x ¾", 1 Fill, 3½"x ¾"
133'-9" Betw. Backwalls
16"
131'-6" b. to b. Ls
11"
5 Cov. Pls. 24"x ¾"
4 Ls, 8"x 8"x 1"
2 Side Pls. 16½"x ¾"
10' b. to b. Ls
6'-1¼"
3'-4¾"
3'-10¼"
FIXED END
Base of low Rail
18'-9⅜" to Top of Rail, N.R.R. of N.J.
129' C. to C. of Bearings
2 Side Pls. 24"x ¾"
2 Ls, 8"x 8"x 1"
2 Cov. Pls. 24"x ⅞"
4 " " 24"x ¾"
EXPANSION END
ELEVATION OF MAIN GIRDER

COMPLEX CONDITIONS AT EXTENSION OF WEST SHORE BRIDGE 4, REQUIRING PLATE GIRDER 129 FEET LONG CENTER TO CENTER. (PLAN OF BRIDGE AND ELEVATION OF GIRDER)

WRECKING CRANES READY TO LIFT 105-TON GIRDER OFF CARS



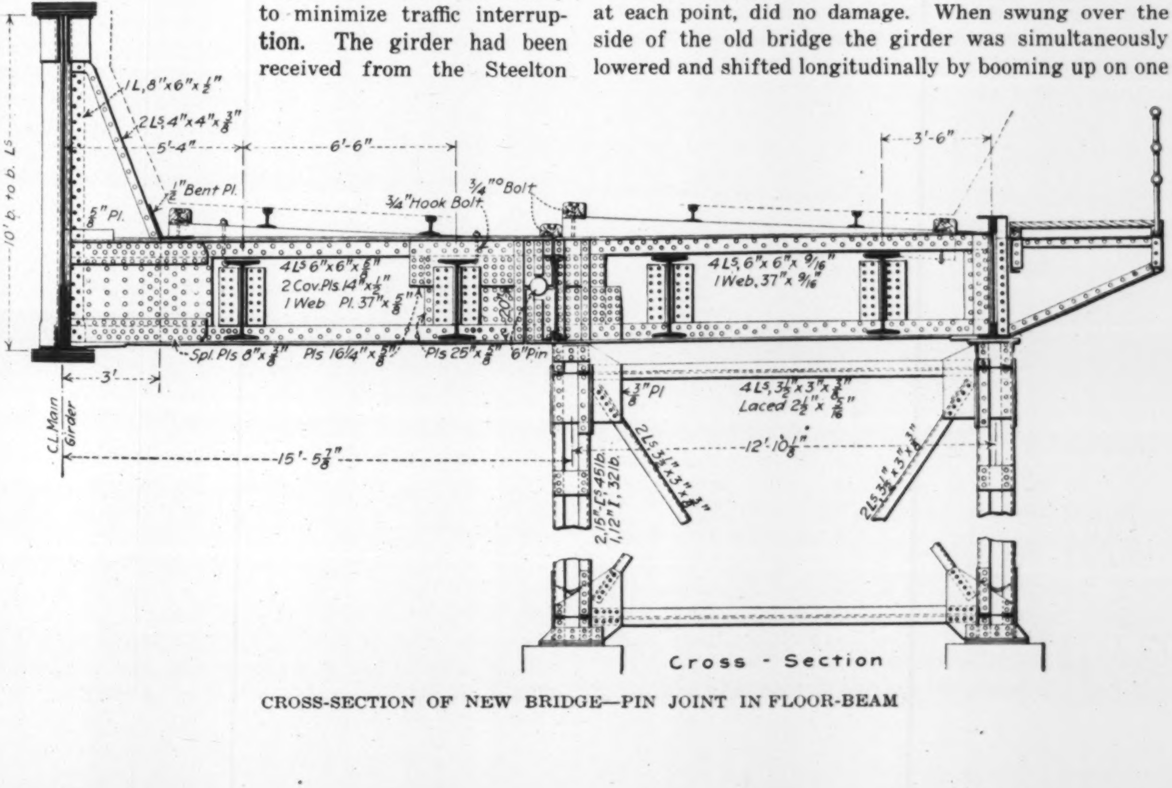
LIFTING GIRDER OVER WEST GIRDER OF EXISTING BRIDGE, READY TO SET ON SHOES

flange cover plates are each about 5 ft. longer than the theoretical length, the extra length being utilized to splice the cover plates lying below.

In the floor construction the support of floor-beams at certain points involved some novelty. Columns support the west girders (the long girder is on the east side), and for lateral stability these are braced as a tower with columns placed under the middle points of two floor-beams to reduce the load on the long girder. The short floor-beam extending inward from the long girder to column has a pin connection to the floor-beam seated on a tower column, as sketched in the drawing. This detail was considered necessary to avoid excessive bending in the floor-beam as the long girder deflects.

The floor was made as shallow as possible because the bridge is situated at the summit of a grade in the West Shore tracks, with an 0.8% gradient northbound and a 0.5% gradient southbound. Setting the heavy girder in place was done on a Sunday to minimize traffic interruption. The girder had been received from the Steelton plant of the Bethlehem Bridge Co. some time before, being unloaded and held in yard storage for about a month while the masonry was being completed. For erection it was set on three flat cars and these were run out on the west track of the old bridge. Two heavy railroad wrecking cranes were brought up to the ends of the girder, on temporary tracks turning off the permanent track, in such a way as to bring the booms directly over the final position of the girder. One of the cranes was a new 150-ton Bay City wrecker, the other a 120-ton machine. The cranes had to lift the girder off the car, swing it outward and over the west girder of the old bridge, lower it and move it 4 ft. longitudinally. The skew of the abutments made it impossible to place the cranes where they could set the girder directly to place without longitudinal shift.

The girder was picked up by pairs of simple girder hooks engaging the top flange angles near either end, which, though putting 50 tons pull on the upper flange at each point, did no damage. When swung over the side of the old bridge the girder was simultaneously lowered and shifted longitudinally by booming up on one


1L, 8"x6"x1/2"
2Ls 4"x4"x3/8"
5'-4"
6'-6"
1/2" Bent Pl.
5/8" Pl.
3/4" Hook Bolt
3/4"⌀ Bolt
10' b. to b. Ls
4Ls 6"x6"x5/8"
2 Cov. Pls. 14"x1/2"
1 Web Pl. 37"x5/8"
20"
Spl. Pls 8"x3/8"
Pls 16 1/4"x5/8"
Pls 25"x5/8"
6" Pin
3'
C.L. Main Girder
15'-5 7/8"
3'-6"
4Ls, 6"x6"x9/16"
1 Web, 37"x9/16"
3/8" Pl
4Ls, 3 1/2"x3"x3/8"
Laced 2 1/2"x5/16"
2Ls 3 1/2"x3"x3/8"
12'-10 1/8"
2Ls 3 1/2"x3"x3/8"
2,15"-[s 45 lb.
1,12" I, 32 lb.
Cross - Section

CROSS-SECTION OF NEW BRIDGE—PIN JOINT IN FLOOR-BEAM of the cranes and booming down on the other. When landed on the end shoes the turned anchor bolts went in easily, showing that the 3-ton shoes had been placed very precisely as to longitudinal spacing. The track was out of service for a little less than two hours.

The bridge was designed in the office of H. T. Welty, engineer of structures, New York Central R.R. R. E. Dougherty, district engineer, directed the erection for the railroad, and Louis Chevalier, chief engineer of the Stillman-Delehanty-Ferris Co., contractor for the steel erection, was in charge for the contractor. The entire work was under the general supervision of J. W. Pfau, engineer of construction, and G. W. Kittredge, chief engineer, New York Central R.R.

What Are the Limitations of Wood Pipe Under Fills?

Failure Under 10-Foot Backfill Emphasizes Need for Careful Soil Examination Before Specifying Pipe Strength

A THIRTY-SIX-INCH wood-stave pipe recently collapsed under a 10-ft fill—an unusual occurrence, but worthy of examination in order that other accidents from similar causes may be avoided. The collapse occurred simply because unusual conditions put a loading upon the pipe greater than it was designed to withstand.

The pipe was 36 in. in diameter, with 1⅝-in. redwood staves held in place by ½-in. iron bands, 12 in. apart, except at joints where the spacing was 6 in. The depth of the trench in which the pipe was laid ranged from 10 to 15 ft., with an average of about 13 ft., so that the average depth of backfill above the top of the pipe was about 10 ft. The bottom of the trench was about 5½ ft. in width. In the service for which the pipe was laid there would be no internal pressure, whereas wood-stave pipe is commonly used for pressure lines.

Because of the rapid seepage of ground water into the trench, pumps had to be used continually during construction. The use of the pumps was discontinued of course when backfilling commenced, and the water level then immediately rose to the normal level, 5 or 6 ft. above the top of the pipe. After placing the backfill in several hundred feet of the trench it was found that the pipe had collapsed.

A section of the pipe laid in trench but not backfilled was then selected as a trial section, and determined efforts were made to complete the work as originally planned. The bands were cinched up carefully and uniformly and as tightly as possible, and the backfill was tamped very thoroughly around the pipe. Even under these conditions, however, when the fill had reached a depth of 4 or 5 ft. above the top the horizontal diameter had increased 1 to 1½ in. and complete failure appeared to be certain if the fill were continued.

The manufacturers of the pipe made shop experiments, using staves 2½ in. thick, as a result of which it was found that even with 2½-in. staves the pipe would not have had enough strength to support the weight brought upon it by the backfill under the conditions that obtained where the failure occurred.

Along this section of the line the top four or five feet of the soil are a heavy blue or black clay or adobe, apparently containing considerable organic material. Below this there is a very fine-grained sandy or silty clay. This is very hard and compact in place but when loosened and pulverized in water it loses all cohesion and becomes liquid.

An independent engineer, called in to report upon the pipe failure, said: "The manner in which the clay used for backfill decomposes in water might leave the extremities of the horizontal diameter of the pipe with little lateral support. The observed lengthening of the horizontal diameter of the pipe would seem to verfy this theoretical deduction. Without lateral support the wood staves can furnish very little resistance to external vertical loads. If ordinary dry material, or material which would compact by tamping, were available for backfill, it would furnish the necessary lateral support. Lacking this, the sides of the pipe must either be in close contact with the walls of the trench, or the intervening space must be filled with some unyielding material. If the sides were thus supported, the wood staves would form an arch capable of sustaining, a portion of the backfill. If the staves were thick enough they would support the entire fill. Otherwise, the balance of the fill must be supported by some other form of construction."

The engineer also included in his report an opinion to the effect that "where the sides of redwood pipe can be held firmly in place so that the horizontal diameter cannot increase, then 1½-in. redwood staves are capable of safely supporting under the most severe assumed condition of loading a mud fill slightly more than 2 ft. in depth over the top of the pipe. If the staves are 2½ in. in thickness this depth of fill can be safely increased to about 6 feet."

METHOD OF REPAIR ADOPTED

In the section of the trench in which the pipe had already been constructed, but on which the backfill had not yet been placed, the trench was backfilled to the level of the pipe center with concrete and a reinforced-concrete arch 4 in. in thickness at the crown was constructed over the pipe. In order that the concrete should not be affected by swelling of the pipe which might take place during setting of the cement, the concrete was placed in layers and a wedge-shaped key at the crown of the arch was poured after the balance of the arch had secured an initial set. No backfill was permitted for two weeks after the last concrete was poured. Meantime, the trench was allowed to fill with water to the ground level, the backfill finally being made in water. Concrete reinforcing was used on about 700 ft. of the 36-in. pipe.

Lumber Production Less Than Last Year

For the year that ended Oct. 31 the 713 mills reporting to the National Lumber Manufacturers' Association cut 15,573,900,000 ft. of lumber and shipped 2½% more than the production. For the 10-month period that ended the same time the production was 4% less than during the same period in 1916, but shipments were 5% more. During October 1,417,700,000 ft. were cut, 5% less than in the same month last year. Shipments were 1,234,800,000 ft., 7% less than in October, 1916.

Kankakee River Is Improved for Drainage of Marshes

Channel Straightened and Deepened Will Reclaim Large Area—Dipper-Dredge Excavation Employed

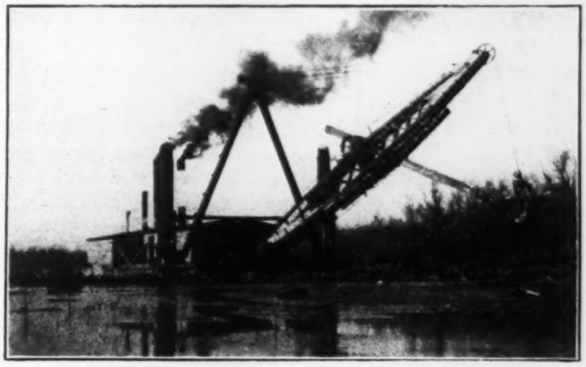
TWENTY-EIGHT miles of the Kankakee River in Indiana are being improved to facilitate the drainage of swamp and overflow lands. The improvement extends from the west line of Starke County southwest to within seven miles of the Indiana-Illinois state line. At a cost of about $310,000 this will reclaim a large area of swamp or marsh land which will be valuable for truck farms and general farming purposes. The river channel, improved ten years ago to the starting point of the present work, is known in the court records as the Marble ditch.

The new work includes the straightening and deepening of the river by a channel which has a bottom width of 70 ft. for 16 miles and 100 ft. for the last 12 miles. The increase in width is made at the outlets of tributary streams. The average depth, including the portions which cross and follow the old channel, is 10 ft. The banks have a slope of 1:1. The grade is 0.02%, which gives a velocity of about 3 ft. per sec. The capacity of the channel will be about 2400 sec.-ft. at the upper end and 3370 sec.-ft. at the lower end.

The soil is mainly a black sandy loam, but in some cases it is almost entirely sand. The first three miles are in clay, but further down there is sandy subsoil with some layers of clay. The completed (upper) part of the channel maintains itself in good condition, and there is no tendency to filling of the channel or caving of the banks. Along this part of the work, therefore, land that was formerly overflowed is now farmed. The channel is crossed by four railways and five public highways. These have plate-girder bridges 120 ft. long, on concrete piers and abutments. Provision is made for lifting the spans to allow dredges to pass for future cleaning of the channel.

This is a dipper-dredge job and the contractors are operating three machines. A dredge with 1½-yd. bucket is used to excavate the laterals or small tributaries. It also works ahead of the large dredge, partially excavating the cut along the sides of the channel. This leaves a portion in the center which a dredge with a 3½-yd. dipper finishes to the specified grade. This dredge is shown in the picture printed herewith. A third dredge, with a 3-yd. dipper was placed in construction at about Mile 14. This machine partly constructs the channel to a depth of about 8 ft. and leaves the bottom to be leveled and finished by the large machine.

The smaller machines have short booms and can work more rapidly than the large machine. They are used to excavate the short-haul work. The largest machine,



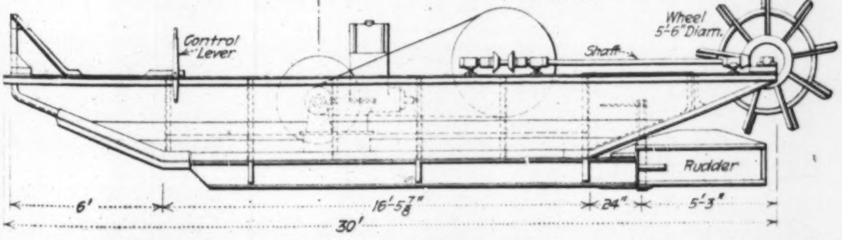
A 3½-YARD DIPPER DREDGE IS USED ON THE KANKAKEE RIVER

which has a hull 110 x 46 ft., carries its 3½-yd. bucket on a 90-ft. boom, so that it can operate from the center and place material over the spoil bank made by the other machines. However, it is not possible for this dredge to complete the entire work of each section without moving from one side to the other as it works downstream. This machine averages about 60,000 yd. per month. The total excavation is more than 5,000,000 cubic yards.

Coal supply for the dredges is provided under favorable conditions, as railways cross the work at frequent intervals. On the greater part of the work it has been possible to dump the coal from cars on the trestle over the ditch directly into the barges, which are hauled to the dredges by small gasoline towboats shown in the drawing.

The boats have 8-hp. kerosene engine belted to bevel gears for driving the wheels in either direction. Longitudinal shafts from this gearing carry bevel pinions which engaged larger bevel gears on the wheel shafts. The ends of the hulls are inclined, and at the sterns large rudders are fitted beneath and in front of the paddle wheels.

It is estimated that the total cost of unloading and handling coal by means of this boat is 75c. per ton. This in-



STERN-WHEEL OIL-ENGINE TUG HAULS SUPPLIES ON DRAINAGE DITCH CONTRACTS cludes the hauling of a small portion of the coal by teams. The contractors are R. H. & G. A. McWilliams, Chicago. The bridges will be built by the county. The work is under the direction of Clifton J. Hobbs, of Rensselaer, Ind., who is drainage commissioner of Jasper County and also superintendent of construction of the Kankakee River improvement in Indiana.

Awakening Recognition of the Engineer

A Canadian View Which Accords with Progressive Thought on This Side of the International Line

"HERE we are, a powerful legion with all the potential attributes of mind, heart and soul to carry us to undreamed heights of eminence, and how far we shall rise as a profession is only limited by the minimum amount of effort which each and every one of us is prepared to give in conjunction with his fellows to make what is reasonably possible a living reality."

With these words, Fraser S. Keith, secretary of the Canadian Society of Civil Engineers, closed a review of the status and future of the engineering profession in an address recently before the Ottawa branch of the society. He stated briefly the recommendations of a report which will democratize the society, placed emphasis on the need of greater service to the individual and maintained that increased recognition and remuneration were within easy grasp if the members of the profession coöperated.

Extracts from his address follow:

At the last meeting of the Council, held on Oct. 30, the report of the committee on society affairs was accepted and approved. . . . The distinctive feature of this report is the increased sense of responsibility of our society, which means the profession, in its relation to the individual member, and of greater importance still, in its relation to its service to the public at large. We have, therefore, apparently reached a point where we know that our former objects were limited and our activities circumscribed, and it is now possible, with that knowledge, to go further, believing that the future of the profession lies largely in how far it is willing to assist the individual member and to what extent he may coöperate with the profession in dealing with all public matters, whereby our interests are affected, using this newly awakened sense in making our combined influence felt outside of the society. It would then appear that (and let me emphasize) *the awakening of the engineering profession involves, in the first instance, the increased recognition of the profession's responsibility to the individual, and the individual's responsibility to the profession, and in the second place their collective responsibility to the public, and in turn an acknowledgment from the public of the engineer's real place in national affairs, which includes status, remuneration and opportunity of service.*

We have been criticized in the past, not only because we were accused of being narrow in our objects, but also it was stated we were collectively without a soul or heart. Be that as it may, if the heart of the profession were a composite heart of the individuals therein it would leave nothing to be desired, but, we must admit there has been some coldness and to some extent indifference, and we should therefore to the greatest possible extent cultivate a fraternal spirit that will develop a heart in our organization, a pulsating, personal heart throbbing with human emotions, and cause that heart to beat warmly and sympathetically not only for our own members, but in our relations with the outside world.

PUBLIC QUESTIONS

It is possible for a branch to include in its discussions public matters of local interest, even where the branch is not directly concerned. In fact, as a profession we will make greater strides if we give fuller discussion to public questions and less to technical subjects than we have in the past. The branch should be more than a mere unit of the local members of the profession. It should be a fraternal organization meeting in a spirit of good-fellowship. It should encourage the younger members in every way and give them an opportunity of learning public speaking, as well as absorbing the ideas of the older men in the profession. It should be ever and always on the lookout for opportunities for service. The branch should be the technical centre in any community and could possibly take an active part in the technical education of the district, or at least give advice thereon.

The proposed changes in the by-laws, as well as the change in name, will to some extent increase the prestige and standing of our various branches. Each branch will elect its own councilors and will consequently be more directly represented at the headquarters of the society than at present. It is intended to hold an annual meeting of the society once a year in every province. This meeting will be directed by council, will have representatives present from headquarters, and the official report of the meeting will be published in the annual report. These changes are based on the admitted necessity of greater fraternity and closer coöperation, and will enable the individual member to come to a better appreciation of his fellow members, together with a personal responsibility to the society and to the profession. The object of our organization in the future will be of a broad enough nature to enable the society both at headquarters and from its branches to engage in useful public service.

REMUNERATION

Some of you may have asked yourselves the question, where does all this lead to and how does it affect our earning capacity? Two definite factors in increased earning capacity are—additional usefulness and added recognition. . . . Let me ask you, what position would the government of Canada be in to-day in carrying out the nation's work without the services of the men in the engineering profession. The majority of the departments of the government would be unable to operate without our help. Do the political members of the government realize that this is true? It is certain that they do not. Why? Because we of the engineering profession have in the past taken no corporate action to insure that they should. Instead we have to some extent acted like dumb driven creatures, accepting the crumbs that have fallen by the wayside, content to sell superior qualities of mind and training for a mess of pottage; for despite your capacity, such in general is your reward in comparison with your true worth. As individuals, it may not be possible to force the recognition needed, but as a body we are a mighty power capable of securing any reward within reason upon which we set our minds and hearts. It is not only in the government service that engineers receive inadequate reward, but throughout the entire profession, and particularly those employed at railway work.

There is one active full member of our society who is a resident engineer on one of the transcontinent railways and his salary is $100 a month. He has a wife and family. Whose fault is it that such is true? Yours and mine. How much longer is the engineering profession going to continue to be underpaid? Just as long as we permit it, gentlemen, and no longer. We have it in our hands to bring about a different state of affairs, but action is required, not words. We have talked in the past a great deal about inadequate rewards and we may continue to talk, but nothing will be accomplished until we secure a higher standard of reward, and we shall find the accomplishment so easy that the wonder will be why we had not thought of doing so sooner. We are to-day exactly in the position of the man staying out all night on his own doorstep because he thought he could not get in, only to find out in the morning that he had the key in his pocket.

The government and railway officials and the general public have only a vague conception of what they owe to the engineering profession for their material welfare, and they will continue in ignorance until we have educated them. In the meantime, gentlemen, it is we who are culpable, not they.

RECOGNITION

The newspapers in this country are the great moulders of public opinion, and it is to them we must look, to some extent at least, for coöperation and assistance. For, once we have convinced the editors that in doing this they are assisting in the public weal, the natural patriotism that characterizes the editorial body would prompt them to act and give their hearty support.

The lawyer and the politician have admittedly failed to solve the industrial relations of man to man and the relations between capital and labor. The very qualifications of mind and training that have enabled the engineer to so successfully grasp and solve any problem set before him will be called upon and required to solve and to deal with what will be, after the war, the greatest problem which we have to face.

We find already many of the executives of large industrial concerns being chosen from our own profession and more and more will the men who have received a thorough training in technical matters be called to the high positions in industrial affairs. This will mean the opening up of a scope for the profession, giving rise to a future that will place the technical man in control of the industrial life of the nation. Coincident with that is arriving a condition whereby the engineer must, besides drawing plans and specifications, give his advice in connection with financing of any industrial or engineering undertaking, so that the time is coming, and very soon, that the engineer instead of receiving the reward that capital is willing to offer will walk hand in hand with the capitalist, on an equal footing, and will share in the rewards that the other has heretofore enjoyed.

In view of such enticing prospects and possibilities for the individual, what limit is there to our development as a profession by acting in unison? Here we are, a powerful legion with all the potential attributes of mind, heart and soul to carry us to undreamed-of heights of eminence, and how far we shall rise as a profession is only limited by the minimum amount of effort which each and every one of us is prepared to give in conjunction with his fellows to make what is reasonably possible a living reality.

Panama Canal Slides Under Control

THE present status of the notorious Culebra slides on the Panama Canal is noted as follows in the annual report for the fiscal year 1916-17, by Governor Chester Harding of the Canal:

"An important part of the work of the dredging division has again been the removal of material from the sliding areas in the Culebra section of Gaillard Cut. Aside from the fact that during the year there was an easily navigable channel available, with but two interruptions of a total of 10 days, as compared with the entire closure of the canal from October, 1915, to Apr. 15, 1916, perhaps the best indication of the improved condition is that the removal of 6,834,072 cu.yd. from the Culebra slides during the year has resulted in a prism of full depth and the full width of 300 ft. throughout, with increased widths of from 200 to 500 ft. at the points of former maximum activity. During the year ended June 30, 1916, 11,210,141 cu.yd. were removed from the same section of the canal. In July, 1916, 1,073,675 cu.yd. were removed, and in June, 1917, 341,568 cu.yd. The West Culebra slide has been quiescent throughout the year, the volume between the peripheral break and the canal having settled to such an extent as to give indications of having reached a condition of stability.

EAST CULEBRA SLIDE STILL MOVES

"The East Culebra slide is still in motion, with occasional periods of increased activity and intervals of comparative rest. Each active period results in a settlement of the entire mass within the limiting break and a horizontal motion toward the center of the bowl-shaped area. Since the dredges have succeeded in excavating the east bank several hundred feet outside of the limits of the canal prism, recent movements of the mass have no longer produced upheaval of the bottom within the prism, or shoals within the canal by the flow of material from the bank, and after every movement the dredges, working outside the limits of the prism, have had no difficulty in excavating the material before it reached the channel. The ultimate condition of stability will evidently be reached when the broken mass has settled to a surface not far from horizontal with a nearly vertical bluff at the limiting break.

"All told, 23,259,909 cu.yd. of material have been removed by dredges from the Culebra slides (east and west), and it is estimated that 3,600,000 cu.yd. yet in motion will have to be removed. The points established last year, at the request of the Chairman of the Slide Committee of the National Academy of Sciences, on Gold, Zion, Contractors, and Purple Hills and at the bases of Gold and Contractors Hills, have been checked from time to time. No indication of movement of the points has been detected. Extension of the peripheral breaks of the east bank have occurred, so as to increase the area of the east slide by 3 acres. The amount of material involved in these extensions is relatively insignificant, and on account of the distance from the canal it is improbable that any of it will reach the prism.

"Cucaracha slide has given no further trouble since the large movement that blocked the canal in August, 1916. To reduce the chances of interruptions to traffic due to future similar movements if they occur, the material in the slide was removed for a distance of 100 ft. outside the canal prism.

"It is believed that in the future the great slides of the canal will be of historic interest only."

Purchasing Officers for the Government

A list of officers making purchases for the Army and Navy and the United States Shipping Board has been received by the Bureau of Foreign and Domestic Commerce and may be consulted at its district offices.

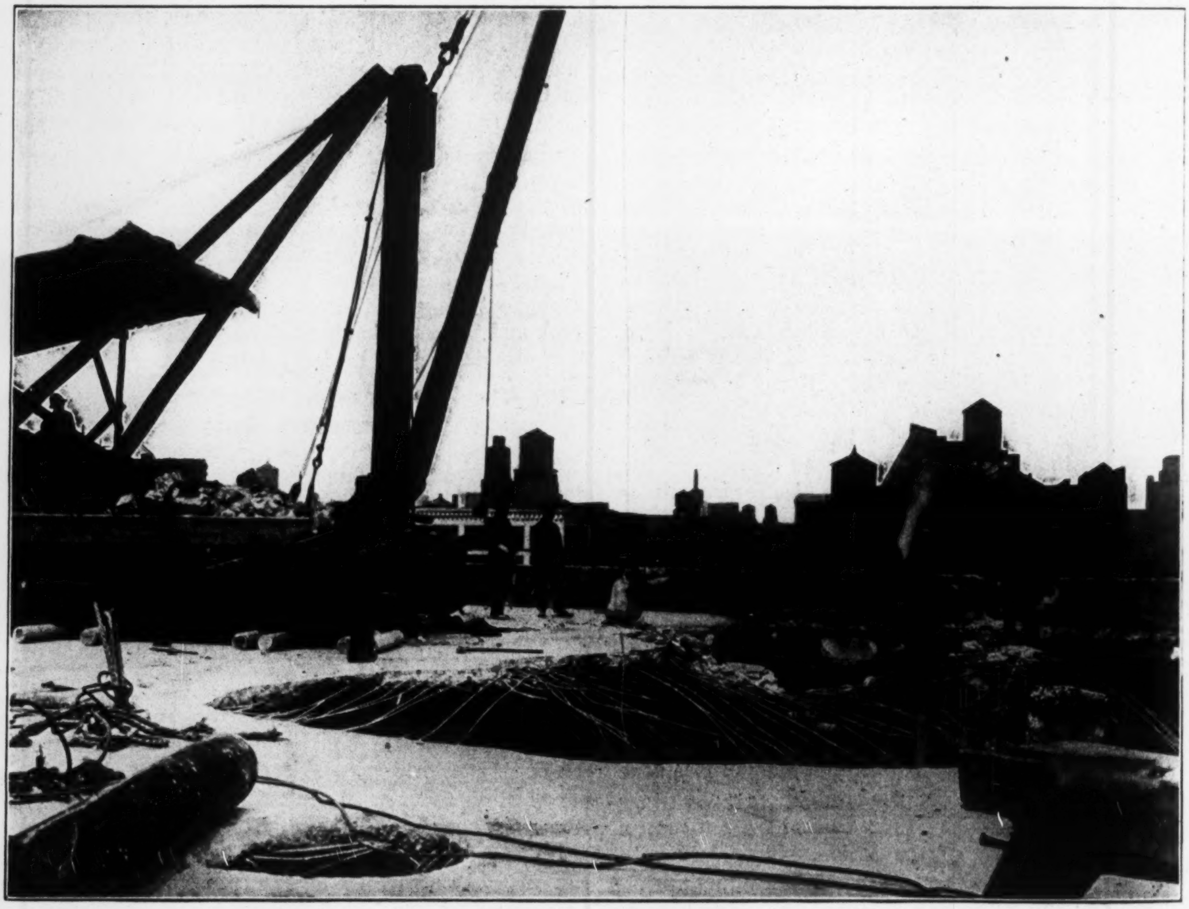
Derrick Wrecks Concrete Building with Heavy Ball

Roof and Floors Shattered Successively—Fire and Torches Help in Breaking Columns—Fire Tried Also on Floors

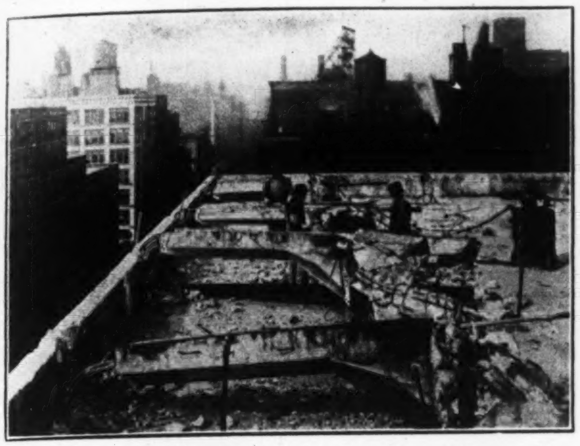
A DROP weight, acetylene torches, fire and chains were the principal means employed in wrecking the eight-story reinforced-concrete Western Newspaper Union Building, in Chicago, to clear the site for the new Union Station. Prior to the destruction loading tests were made on one of the flat-slab floors, as described in *Engineering News-Record* of Sept. 27, p. 597.

Designed for floor loads of 300 lb. and 250 lb. per sq.ft., the building was of heavy construction and heavily reinforced. The flat-slab type of floor was used for the lighter load and beam-and-girder type for the heavier load. The building was erected in 1909-10.

Smashing the concrete by dropping an 1800-lb. cast-iron weight upon the floor slabs and girders was the principal method employed. For this purpose an electrically operated stiff-leg derrick with 20-ft. mast and 40-ft. boom was employed. This gave a 30-ft. vertical drop. The cable overhauled the drum, and was not detached from the drop. The ball or weight was somewhat pear shaped, and with a rounded bottom. On the roof and then on each floor in succession the derrick was



THIS DERRICK WITH DROP WEIGHT SMASHES HEAVY CONCRETE FLOORS



REINFORCED-CONCRETE COLUMNS AND GIRDERS ARE PULLED OVER ON THE FLOOR, WHERE RODS ARE CUT AND CONCRETE IS BROKEN UP

moved along the rollers until it had covered the entire area. It was then lowered to the floor below by means of an inclined skidway.

Repeated blows shattered the concrete slabs, so that the pieces fell through the network of reinforcing steel. A gang of about 40 men broke up the larger pieces with sledges. They also pulled out the steel bars and threw them into an adjacent lot which had been already cleared. The débris was hauled by a slip scraper to a chute near the middle of the building, delivering it to a bin from which it was discharged into motor trucks standing on the first floor.

Girders and beams were broken up in the same way. In some cases the girders fell in large masses but remained suspended by the steel reinforcing bars, which were then cut by acetylene torches. Interior columns were broken partly by dropping the ball on their heads. Wood fires at their bases were used to heat the concrete, which cracked and spalled when water was thrown upon it by a hose. The exposed vertical rods were then cut with torches and the columns and girders were pulled over. With these small open-air fires the heating and chilling of the concrete had no great effect, but it sufficed to expose the rods.

Exterior columns could not be broken by the drop weight, as this would have resulted in throwing material into the street. The concrete at the base was partly broken away with sledges, and some of the bars were cut with torches. Chains were hooked around the column heads and the spandrel girders, and attached to the cable of the derrick standing on the floor level with the base of the columns. In this way the columns and girders were pulled over upon the floor, where the remaining rods could be cut and the concrete broken up conveniently.

Disintegration or softening of the floor concrete by oil and fire was tried. Oil was poured over it and a fire then lighted on the slab. The penetration of the oil was so slight that this method assisted the drop weight only to a small extent, and it was found that the results did not justify the extra time and expense. Wrecking the floors by an upward pull was suggested, but it would have been difficult to get a rig suitable for pulling. Derricks are not adapted for such stresses, and in fact the boom of the derrick used on this work was broken when an attempt was made to tear out some of the reinforcing steel.

Removal of window sash and frames, piping and other fixtures preceded the wrecking. The demolishing of the structure was commenced in August, with the derrick mounted on the roof. It will be completed before the end of year. The W. J. Newman Co., Chicago, has the contract for this heavy wrecking job. All work is under Thomas Rodd, chief engineer of the Chicago Union Station Co., J. D'Esposito is assistant chief engineer and A. J. Hammond is principal assistant engineer.

City Management Does Not Mean Municipal Ownership

H. M. Waite, City Manager, Dayton, Lays Down Reasons for Coöperation Between Utilities and Municipalities

COÖPERATION between cities and utilities will solve the difficulties the former have in getting service, and the latter in making a living, according to H. M. Waite, city manager of Dayton, Ohio, who discussed the subject at the recent convention of the City Managers' Association at Detroit. His remarks are abstracted below:

Undoubtedly many have got the idea that city management means municipal ownership. There is just one thing in which communities are interested jointly with utilities, and that is service. By this I mean, broadly, everything that service implies, gives and requires—proper service to the community and a fair return to the utility on a fair valuation. Public ownership of utilities is a long way off, though ultimately it may be the answer. Our municipal governments are too uncertain yet to think seriously of municipal ownership.

Cities all over the United States are spending a great deal of money in laying out a program for everything but utility service. Money is being spent on sewers, water and streets, but how many cities are spending money on future service from their utilities? If your utilities have not a sufficient return to give service the community suffers. If your transportation utilities cannot automatically expand to meet the transportation of your community, your community suffers.

Financially, today the utilities are struggling. It isn't a question of war times—their securities started to shrink long before the war began. What is the trouble? Too often there is not enough coöperation between the municipality and the utility. There seems to be a feeling of antagonism toward public utilities. Is it because the utility is not giving the service that the public demands, or thinks it needs? Does the public know what service it does need? Those two questions demand investigation. As long as public antagonism exists there is a corresponding shrinkage of securities, and naturally there follows a shrinkage in the service rendered by the utility. Everything points to the necessity of coöperation between the utility and the people.

Having followed this line of thought in Dayton we went to the transportation utilities and asked: "Where are you heading?" They did not know. The operating man has no time to think about the future of his property 10 to 20 years hence, but he knows that he is being pinched now. The city employed a man to go over the properties and make a preliminary report as to where they were heading.

You never can get coöperative feeling between the public and the utilities with the indeterminate franchise. You cannot interest the public in any utility if the public has not a direct interest in that utility. I believe we shall see, and that very quickly, an abandonment of the indeterminate franchise, giving to the public a direct benefit by making possible a liberal, fair program of expansion to meet the requirement of service.

If your utilities cannot expand automatically, freely, fairly and economically, to meet the demands of your community, then your community will suffer. Therefore, I believe in comprehensive agreements between cities and utilities, based on thorough local investigations. I also believe in a determinate franchise, with a fair valuation of the property, with fair fluctuations in the cost of service to meet the changing requirements of the time, and with a payment to the city of all over a certain fair return on a fair valuation.

Exhibit Board Educates Students in Current News

Substantial, Expensive Construction Made Part of Building to Impress Observers with Importance of Subjects

INTEREST in current events in the engineering world is fostered among the engineering students at Northwestern University, Evanston, Ill., by means of an elaborate, permanent exhibition board. Since some engineering societies have under consideration the exhibition of photographs, maps and other material illustrating enginering topics of the day, a description is given of this board, which has created among the students a desire to keep up with the times.

It has been the policy at Northwestern to have one central educational idea around which the exhibit centered, but in each case one or two panels were taken up with a special exhibit calling attention to particular engineers and engineering achievements having special "news value." This part of the exhibit is changed more often than the remainder.

Recently the main exhibit was on the National Bureau of Standards, the central panel containing a large blueprint of announcement and having on either side photographs of the buildings, testing machines and specimens. All are properly labeled with well-written paragraphs designed to give enough information to tell what the pictures are about. Something is left to the imagination, with the idea of leading the observer to investigate the subject further.

Some of the educational exhibits are as follows: Great bridges; severe survey conditions and general information about Chicago weather; electrical development in power plants; wireless telegraphy and remote control; uses of terra cotta; automobile construction; landslides at Panama; work of the U. S. Coast and Geodetic Survey.

On the single board which the students call "Engineers and their stunts" have been shown photographs of the builders of the Catskill Aqueduct and of the Que-

ENGINEERING NEWS OF DAY SHOWN ON SUBSTANTIAL BOARD bec Bridge, with short extracts from recent articles of appreciation in *Engineering News-Record.*

In design, the idea was to make the board appear as a part of the building. It is situated on the second floor, where virtually all students must pass it frequently. A 25-ft. stretch of wall was available, and the height was selected so that the eye of the average person would come near the center of the 4-ft. panel and ordinary type could be read at the top. The 4-ft. width was chosen so as to obtain plenty of room for large maps. The doors of the panels are ¼-in. plate glass set in pressed-steel hinged frames.

The wood framework is of oak veneer, to harmonize with the trim of the building, 9 in. wide and 2¼ in. thick. At the back is a sheet of soft cork-board into which thumb tacks press easily. To permit the exhibition of books the space between the glass and board in the two central panels is 1⅝ in. In the others it is 1 in. The whole frame is permanently anchored by bolts to the wall. The entire cost was about two hundred dollars.

The exhibition board was suggested by John F. Hayford, director of the College of Engineering, and the design and execution were carried out by the architects for the university.

LETTERS TO THE EDITOR

Comment on Matters of Interest to Engineers and Contractors Will Be Welcome

Should Engineering Students Be Drafted?

Sir—In reply to the inquiry of Dr. Palmer C. Ricketts, president of the Rensselaer Polytechnic Institute, as to the wisdom of drafting students of engineering schools, I beg to give as my opinion that it is wrong to do so. It is wrong because all of those of military age and red blood have volunteered, and those that have not would be useless if drafted. F. J. MACISAAC,

Smith, Hauser & MacIsaac, Inc., Contractors.
New York.

Are Values for Nailed Joints Too High?

Sir—The writer has read with interest the article "Tests on Nailed Joints in Fir and Hemlock Timber," published in *Engineering News-Record,* Nov. 8, 1917, p. 871. Outside of one other set of tests (*Engineering Record,* Jan. 13) the tests of the Bureau of Buildings of Portland comprise the only published record on the lateral strength of wire nails in conjunction with Douglas fir.

The writer has made a careful study of a number of tests on nailed joints [Mr. Dewell notes particularly the items Nos. 5 to 9 in the appended bibliography of tests. —Ed.] The results of his investigations from these data are embodied in his book "Timber Framing." Without having recourse to direct tests on Douglas fir he has considered that for all practical purposes the lateral strength of nails in yellow pine and Douglas fir may be regarded as equal, and he has proposed that the safe working strength for a wire nail in either of these timbers, when such nails are driven normal to the fibers of the timber, may be expressed by the formula $S = 4000\ d^2$, where S = safe lateral resistance of one nail in pounds; d, diameter of nail in inches.

This formula is given after study of all the tests made, the values for the different timbers, as white pine, Norway pine, oak, yellow pine, etc., being considered in accordance with their physical properties, and special attention being paid to the elastic limits.

The statement made in your article that Professor Hatt suggests that the safe resistance of a nail for resisting lateral forces be taken as 9.6 times the pennyweight of the nail is hardly correct, nor is the line "Safe loads suggested by Hatt" in your figure in accordance with Professor Hatt's recommendation. Professor Hatt advises the formula $S = 9.5\ D$, where S = safe lateral resistance in pounds of one nail in yellow pine, and D, pennyweight of the nail; but he states that this formula should be taken only for nails up to and including 20d nails. For nails above this size, the formula will give too high values. Furthermore, the values given by the foregoing formula represent a safety factor of five on the ultimate strength of the joint, and a safety factor of three on the elastic limit of the joint, for the tests under discussion, that is, those of Darrow and Buchanan.

It appears that the recommended working values of the Portland Building Department are about a mean between those values representing a safety factor of three on the ultimate strength of their tests and the safe values according to Professor Hatt's formula, erroneously applied, and the writer believes that virtually all these recommended values are higher than is warranted.

In the table given herewith, there is presented the ultimate strength of one nail in "single shear" in a timber joint of yellow pine or Douglas fir, for the various sizes of wire nails, as determined by previous tests. The table also gives the average of all these results for each size nail, and the safe working strength as determined by the writer's formula, $S = 4000d^2$, with the corresponding safety factor in the average ultimate strength shown by all the tests.

The results of these various tests differ widely. This variation is due largely to the differences in strength in the timber blocks used, as different specimens of the same kind of timber will show different compressive strengths, due to moisture conditions, density, etc. It will be realized that the factor of density must exercise a considerable influence on the strength of a nailed joint in many instances, due to the large proportion that the thickness of the annular rings bears to the diameter of nail. The strength of such nailed joints is a function of the bending strength of the nail, and also, in every case, a function of the compressive strength of the timber, both in end bearing and bearing across the fibers.

The tests of Walker and Cross, since made on Norway pine, are not directly comparable with the later tests on yellow pine and Douglas fir. The numerical values for the ultimate strengths were low as compared with those found by the other tests. It was found that the strength of the nails at the elastic limit followed with remarkable closeness the formula $Se = 5500d^2$. This series of tests comprised some 300 joints.

Your article states that an effort was made to determine the elastic limit of the joints, but this could not be established. The tests of Walker and Cross, Darrow and Buchannan, Morgan and Marish found, according to the published reports, that the elastic limit of the joints occurred at a load of about 60% of the ultimate load, and at a slip of the joint of approximately 1/16 in. Wilson, in the Forest Service tests, states that the elastic limit was well defined, and occurred at a comparatively small deformation, namely, with a slip of from 0.018 to 0.039 in. and at a load of from one-third to one-half the ultimate load.

In this connection the writer would remark that in all these tests, with the single exception of the Forest Service tests, the methods adopted in measuring the slips were apparently quite rough. In at least two of the series of tests, the slip of the joint was noted only for 1/16-in. deformations, and was measured on one side of the joint alone. This rough method cannot be expected to give the true value of the slip of the joint, and any load-slip curve plotted from such results will very probably give an uneven or angular curve. The writer's experience in testing timber joints has been that whenever the true deformation of the center of the joint is determined, the resulting load-slip curve is remarkably smooth.

With regard to the elastic limit, a full description of all such tests should define what is meant by the elastic limit, that is, whether that point is meant at which no permanent set in the joint occurs, or whether the elastic limit is used in place of the better term yield-point. In the case of timber joints, the writer believes that this latter point is best determined, by the method of the late Prof. J. B. Johnson, as that point on the load deformation curve at which the tangent to the curve has 3/2 the inclination of the tangent at the origin of the curve. Furthermore, the writer believes that this point should always be determined, and the working values should always be based on corresponding loads.

In conclusion, the writer believes that the working values as established by the Portland Building Department are too high for general use in a building ordinance. The engineer will usually use his own judgment in such matters, based on the published data of tests. On the other hand, the average architect generally belives that all working values established by engineers carry a safety factor of from four to five, and designs accordingly. In addition, such considerations as impact, or relation of probable live load to actual dead load, seldom enter his head. Consequently, it is the writer's opinion that any values established for a building ordinance should be conservative rather than high.

San Francisco. H. D. DEWELL.

[In justification of the Building Department of the City of Portland it should be stated that its report did not contain the curve ascribed to Professor Hatt. That was added in the office of *Engineering News-Record* and was extended, as Mr. Dewell points out, beyond the limits intended by its originator. The original report, which is quite extensive, contained a considerable discussion on the elastic limit, which was not included in the abstract in this journal.

There is appended herewith a bibliography of the subject made up from references gathered by the Portland department and by Mr. Dewell.—Editor.]

BIBLIOGRAPHY OF TESTS OF HOLDING POWER OF NAILS

(1) "Tests of Metal," 1884. Tests of the adhesive resistance of nails in timber, made at the Watertown Arsenal on white pine, yellow pine, white oak and chestnut.

(2) *Engineering News*, Jan. 11, 1894. "Experiments to Determine the Holding Power of Nails and Drift Bolts," by F. W. Clay. Red oak.

(3) Transactions of the American Society of Mechanical Engineers. Vol. 16, 1895. By. W. E. Barnes and R. O. Stillwell, to determine work required for driving and pulling out nails. Recorded by R. C. Carpenter. Southern pine.

(4) Association of Engineering Societies, February, 1896. Experiments made by Frank Soulé on the resistance offered by nails to pulling from Douglas fir and redwood.

(5) Association of Engineering Societies, December, 1897. Tests of the lateral resistance of nails in Norway white pine and oak, by F. B. Walker and C. H. Cross.

(6) Proceedings of the Indiana Engineering Society, 1900. Tests by H. D. Darrow and D. W. Buchannan at Purdue University in 1898. Described by Prof. W. K. Hatt. Yellow pine and oak.

(7) Bulletin No. 2, Vol. IV of the Experiment Station of Iowa State College. Tests by C. K. Morgan and F. Marish at Iowa State College in 1907. Described by M. I. Evinger. Nails ranging from 8d to 60d and lumber white pine, yellow pine, spruce, fir and oak.

(8) *Engineering Record*, Jan. 13, 1917. Test by J. C. Stevens on Douglas fir.

(9) *Engineering Record*, Feb. 24, 1917. Tests by the Forest Service at Madison, Wis., described by T. R. C. Wilson. Yellow pine.

ULTIMATE STRENGTH OF ONE NAIL IN "SINGLE SHEAR," AS DETERMINED BY VARIOUS EXPERIMENTERS, FOR YELLOW PINE OR DOUGLAS FIR

(1) Size of Nail in Penny-weight	(2) Darrow and Bu-channan	(3) Morgan and Marish	(4) Forest Service Wilson	(5) Bureau of Build-ings Port-land	(6) Aver-age Ulti-mate Strength	(7) Working Values Accord-ing to Formula $S = 4,000d^2$	(8) Safety Factor on Av. Ult. Strength Col. 6
6	240		....		240	53	4 5
8	361	294	....		328	62	5 3
10	724	324	....	525	524	88	5 9
12		625			625	88	7 2
16	855	494		600	650	110	5 9
20	930	746	779	749	808	165	4 9
30		1,221	783	922	926	194	4 8
40	1,450	1,067	845				
			1,125	1,183	1,134	226	5 0
50	2,000	1,425	1,261	....	1,575		5 9
			1,615	....		268	
60	....	1,783	1,144		1,593		
			1,644	800	....	322	4 9
80					....	364	
Average safety factor							5 4

Does Waterproofed Concrete Resist Sea Water?

Sir—We have noted with considerable surprise the statement made in the article of Messrs. Wig and Ferguson on the "Selection of Materials for Sea-Water Concrete," in your issue of Oct. 18, that concrete containing our Toxement integral waterproofing compound showed the same "defects and deterioration" as structures not containing it.

We have thought we had some good evidence to the contrary, but assume that Messrs. Wig and Ferguson can back their general statement with specific instances.

New York City. TOCH BROS.

[This letter was submitted to Messrs. Wig and Ferguson who replied as follows:—Editor.]

Sir—The statement we make in reference to the use of waterproofing compounds that "the same defects and deterioration are present in the treated structures as in those untreated" is substantiated by the examination of marine concrete in which such ingredients were used.

Referring specifically to Toxement, we found three structures where this material had been mixed with the concrete. These are all in New York harbor. One of these is a reinforced-concrete pier. In this case the same cracking of beams and kneebraces has occurred as was found in many other reinforced-concrete structures along our coasts. In one of the dry docks in New York harbor Toxement was added to the concrete. Most of the concrete in the walls of this dock is covered with a brick veneer and the condition of the concrete back of the brick could not be determined. At the bow end of the dock, however, the concrete wall is exposed, as the brick facing was omitted. Here the concrete has deteriorated considerably and shows typical sea-water effect. In making repairs in 1912 to one of the quay walls at the New York Navy Yard Toxement was used in the concrete. This section is at present in very good condition, but not any better than a number of others of considerably greater age in which no waterproofing compounds were added to the concrete.

In making an investigation of the effect of waterproofing compounds on concrete the Los Angeles Harbor Department experimented with a number of compounds, among others Toxement. As far as this compound was concerned, the tests showed that it reduced the compressive strength of the concrete about 12% at the age of one month and about 40% at the age of three months.

Experiments made at the Bureau of Standards indicate that the addition of Toxement to concrete decreases not only the strength of the concrete but also decreases the density, which quality is so essential for concrete subjected to sea-water action.

RUDOLPH J. WIG,
LEWIS R. FERGUSON.

Washington, D. C.

[To this answer Toch Bros. replied as follows:—Editor.]

Sir—In the explanation by Messrs. Wig and Ferguson of their statement, the first instance cited is said to be a reinforced-concrete pier, though no name is given for identification, and it is stated that "in this case the same cracking of beams and kneebraces has occurred as was found in many other reinforced-concrete structures." Cracking of this sort in exposed beams and kneebraces occurs in many localities other than along the seacoast and is due to stress from temperature variation, and has nothing to do with imperviousness of the concrete. We do not claim that Toxement increases the tensile strength of concrete. We note that any reference to disintegration in the substructure or portion in contact with the water has been carefully omitted.

As to the statement that the exposed concrete in the dry dock in New York harbor "has deteriorated considerably and shows typical sea-water effect," we will say that we have just inspected this dock and cannot agree with the statement. The entire surface is unusually hard, smooth and sound except for a patch about one foot square which has been broken off and may or may not be due to salt water corrosion.

As to the tests in the Los Angeles harbor, we have no knowledge of any such experiment, beyond the statement made here, and have no means therefore of refuting it specifically. We can, however, refute it in general by quoting from Technologic Paper No. 3 of the Bureau of Standards which gives on p. 126 a comparison of the tensile and compressive strengths of mortars waterproofed and unwaterproofed and for a 1:6 mix; the figures are as below. The number of Toxement in these tests was 28.

	Compressive Strength						Tensile Strength					
	Age in Weeks						Age in Weeks					
	1	2	4	13	26	52	1	2	4	13	26	52
No waterproofing	559	612	733	1,056	1,326	1,673	96	115	183	207	248	259
Toxement	353	552	596	1,021	1.210	1.775	78	113	140	187	229	287

The last statement that "experiments made at the Bureau of Standards indicate that the addition of Toxement to concrete decreases not only the strength of the concrete but also the density," is apt to be misleading. In one such test two specimens of a given mix to which 2% of Toxement had been added were photographed and compared with two specimens of the same mix without Toxement. It was found in the Toxemented specimens that the stones appeared to be spaced further than in the specimens without Toxement, and in the sense that the proportion of mortar to stone was greater in the former than in the latter cases the density was decreased. This is exactly the result, however, that would have been obtained if a mix richer in cement had been used, and simply showed that hydration of the cement had been promoted and its swelling action brought into play in the Toxemented specimen. The statement, however, fails to mention the fact that the Toxemented specimens were found to be less porous than the others.

We believe that porosity is the primal cause of disintegration of concrete by sea water and that Toxement decreases this disintegration by decreasing the porosity.

New York City. TOCH BROS.

Variations in Transit Needles

Sir—I have read with interest the communication of Mr. Newbrough in your issue of Dec. 13, p. 119, in regard to the difference in needles. Of course, the existence of such difference has been known at least from the time of Rittenhouse, but the amount given by Mr. Newbrough is in one instance much more than I have ever seen—30 in. being as much as is found except in rare instances. Those interested in the subject might turn to page 544 of *Engineering News* of June 28, 1894, and see the call down I received from the editor for venturing to suggest that such difference existed at all.

Rockland, Maine. O. H. TRIPP.

Profiteering and Industrial Unrest

Sir—I was much interested in the editorial entitled, "Profiteering and the Industrial Unrest," in your issue of Nov. 22, and also in the one entitled, "Whither Are We Going?", in the issue of Nov. 29. These are timely discussions, and I am glad to see a journal of your standing and influence taking such advanced ground in a field too much neglected by engineers.

I have believed for some time that we have not realized the extent to which the business of the country has been subject to sinister manipulation on account of the fact that "credit power has been in private hands." In your first paragraph you point out that "tremendous changes have occurred since April in our economic and political structure." No less has public opinion changed in its attitude toward big business, as is clearly indicated by this excerpt from your editorial, "It (the credit control) has been the bulwark of privilege and the undoing of those who had the vision, the organizing ability, the inventive genius, but were unable to tap credit resources." Credit is based on faith, and *control of credits* will, in the future, be as objectionable as the control of individual initiative.

In a paper recently presented to the Engineers' Club of St. Louis, I pointed out, in discussing the relation of engineers to modern business systems, that the fundamental principle of modern business is credit, which has its foundation in *confidence;* but since the prime motive in the organization of business systems is *that incomes may be secured for investors* and since the control of such organizations lies in the hands of *men who live by their incomes and who are in business solely to make money,* it appears to be a plan admirably calculated to undermine confidence and to defeat its own ends.

You do well to raise the question as to what shall be our attitude when the world conflict ceases. It appears quite probable that industrial chaos will follow the close of the war unless the great and long-suffering public insists upon coöperation with its interests by big business and the representatives of labor alike.

I commend you on the timeliness of this editorial and would urge upon all engineers careful attention to the last line of your closing paragraph, where you refer to those interesting and important questions which "engineers should have a part in answering."

E. J. McCaustland,
Dean, Faculty of Engineering, University of Missouri.
Columbia, Mo.

Easy Method of Obtaining Squares

Sir—Referring to an article entitled "Rapid Methods for Rapid Calculations," by Mr. H. S. Jacoby, in your issue of Dec. 6, I would suggest an accurate and short method of obtaining squares, which I often use to advantage.

For instance, let the square of 48 be required. It is a simple matter to add mentally 2 to 48 and to deduct 2 from 48, which equals 50 and 46 respectively, and by multiplying the sum and difference (46 × 50), and adding the square of the number which we have added and subtracted, 2, obtain the result, 2304, very rapidly.

Another example: Required, 494^2

$$\begin{array}{rcrcr} 494 & + & 6 & = & 500 \\ 494 & - & 6 & = & 486 \\ 486 & \times & 500 & = & 244{,}000 \\ & & 6^2 & = & 36 \\ \hline & & & & 244{,}036 \end{array}$$

Boston. Louis A. Hornel.

Engineers and the War

Sir—In the Nov. 22 issue of *Engineering News-Record* there appeared a short but timely editorial concerning the lack of discussion by engineering societies of the industrial and engineering problems that have a direct bearing on the prosecution of the war.

As the Engineers' Society of Western Pennsylvania is not to be numbered among those not alive to the present conditions, we wish to call your attention to a paper on "Industrial Housing," presented to the Society on Nov. 13 by H. Walter Forster, general manager of the Independence Bureau, Philadelphia.

Industrial housing is considered by those familiar with the situation as one of the most pressing subjects correlated with the manufacture of Government supplies. The paper read by Mr. Forster was interesting and instructive. His statements were substantiated by statistics gathered by Government commissions in this country and Great Britain. He concluded that relief must be immediate; furthermore, that the Government and large manufacturers must take an active part in providing new and substantial houses.

The 80 concrete houses recently completed by the American Steel and Wire Co. at Donora, Penn., furnished an excellent example of work being done by the large corporation to relieve the housing shortage. On the Saturday following Mr. Forster's talk, the Engineers' Society of Western Pennsylvania conducted a trip to Donora to inspect these houses.

K. F. Treschow,
Secretary, Engineers' Society of Western Pennsylvania.
Pittsburgh.

Pinned Floorbeams Not New in Holland

Sir—In *Engineering News-Record* of Nov. 29, p. 1007, you describe briefly a flexible connection of floorbeam to truss in a bridge recently built by the Dutch State Railways.

I would like to call your attention that this is not a new type of construction, but has been in use in Holland for some years in large railway bridges, with success. This construction gives the advantage of eliminating the floor beam bending effect in the vertical truss members, which always occurs when the floorbeam connection is rigid. When, as engineer of the Holland Railroad Co., I investigated the large span over the Rhine near Rhenen, built about 1890, I could not detect any secondary stress in the vertical compression members.

The end floorbeams are always rigidly connected to the truss, in order to get a stiff end portal to bring the wind pressure from upper chord to bridge supports. A little more steel is necessary for the lower wind bracing than in the rigid connection, but the extra cost cannot be compared with the saving of steel in the vertical compression members. H. B. J. Aikema.
Bartlesville, Okla.

Steam vs. Gasoline

Sir—Regarding the item, "Electric or Oil Engine for Railway," on page 1019 of your issue of Nov. 29.

Like everybody else, my company is also facing the problem of lower operating costs. We propose the use of a steam-driven motor car, in preference to gasoline, for reasons quite similar to those of old "Hook 'Er to the Biler"—— when there's steam there's power. A number of successful steam-driven automobiles are now on the market. The type of power plant used in these can be enlarged to the size of an engine capable of driving a railway car.

The steam plant is preferable because of its simplicity, dependability and uniform starting torque. The gasoline motor cars are complicated, for the engine itself must have many moving parts, and must be connected to the drive wheels through a clutch and chains or train of gear wheels, or, in the gas-electric plant, to a dynamo, then to controller and motors; it must also have self-starter and numerous other devices. The more contraptions on a machine, the more grief for the operator, and much of this can be eliminated by the use of steam.

But granting that simplification of plant is impossible, steam is more readily adapted to starting a heavy car. The gas engine will not "take hold" of an overload, and must be going at a great rate to deliver its power at the time when that is most needed. A loaded car starts slowly. A steam engine would settle itself to the business of starting that car—no jerking or fussing, no pausing for the governor to open the mixer valve to admit more gas to make more power that should have been there in the first place to start that car, and then maybe flooding the motor down and having to try all over again.

A steam power plant would use kerosene or fuel oil with less trouble to all concerned than an internal-combustion motor. R. F. MIRICK,

Chief Engineer, Gulf, Plainville & Northern R.R.

Great Bend, Kan.

"A Highway for Anything in Reason"

Sir—Your timely editorial on highways in your issue of Dec. 6, is very interesting to an onlooker, but it would not have hurt if you had made it stronger.

There is no body of men of my acquaintance so prone to use the expression "It can't be done" as the highway engineers and their workers.

Years ago Melvil Dewey, probably the greatest librarian of our time, was asked when a public library should be open. His reply was: "Whenever the public would use it; 24 hours in the day if it were used." Why would it not be a good idea for the highway engineers and their assistants to "buck up" and adopt a similar plan of action with a slogan, "A highway for anything in reason to travel?"

The metalling of highways has reached a very high point, but it will not hold up the traffic, unless the foundation is good, any more than the rails of a railroad will hold up its traffic if laid on rotten cross-ties.

Jewett Cit" Conn. A. A. YOUNG.

Enrollment in Engineering Schools and Engineers' Salaries

Sir—In several recent numbers of *Engineering News-Record* appear letters deploring the fact that the enrollment of students in the engineering schools has decreased, and there seems to be a fear on the part of certain engineers that there will be a shortage of engineering talent in the very near future.

It is generally conceded that the price of an article is governed by the relation of supply to demand, and that conversely the available supply in its relation to demand may be judged by the price obtainable. If this be true of engineering service—as it probably is—it would seem that there is an oversupply of engineers. An examination of the "Searchlight Section" of your paper shows a constantly decreasing space devoted to positions vacant, and a constantly increasing space devoted to positions wanted. A study of the salaries offered, taken in conjunction with the experience and education demanded, indicates that the employer is still very far from the point where he must shut up shop for lack of engineering help. A careful reading of the "position wanted" advertisements shows very clearly that in the majority of cases the advertiser is a man of experience and ability whose employer does not believe in the socalled shortage of engineers, nor in the increased cost of living.

My own experience is necessarily local, and my observations may not be of universal application, but it is a fact that among my acquaintances there has not been any general advance in salary, and that in the few cases where a small increase was granted to retain a man's services the increase was far less than the increased cost of living. It is also a fact that there is no demand for engineers except at the same old salary or at most a 10% increase. These remarks apply to men of $125 to $175 grade, and not merely to the failures, so that the writer for one does not feel any anxiety about the supply of engineers in the near future.

When we see an advance of from 25% to 50% in the salary of the average engineer, we may begin to take some steps to increase the number of engineering students, and offer to them an actual reason—expressed in dollars per month—why they should stay in the game. So long as the man with a grammar school education can make just as much money in the shop as the engineer with his expensive education can make in the office or on the job, there is not much reason to increase the supply of engineers. When the salary of the engineer increases in the same proportion as the wage of the laborer or of the mechanic, or even keeps step with the cost of bread and butter, he will be more favorably inclined toward the swelling of the ranks.

JOHN F. JOHNSON.

Keeping Abreast with the Times

Sir—Last New Year's, I made a resolution to add something every day in the year to my notes on engineering. That resolution I have kept faithfully, allowing myself no holidays whatsoever.

The result has been that in less than a year I have written more notes than in six years of desultory work. In fact, the practice has been so beneficial to me that I wish to recommend it to all recent graduates, and to others who like myself have done little systematic work. Something written down in permanent form every day is the plan. F. W. MULDOON.

Detroit.

Garbage Adds Pound a Day to Weight of Hogs

In anticipation of feeding cantonment garbage to hogs, Prof. John M. Evvard, of the Iowa Experiment Station, made observations on eight pigs. At the start, these pigs weighed 52 lb. each. They were offered an average of 23.6 lb. of garbage daily for 70 days. Of this they ate an average of 19.6 lb. each, and added 0.96 lb. to their average weight, which was thus brought up to 120 lb. For the next 30 days one group of the hogs received garbage alone, as before, while another group were "self-fed" with middlings, in addition to the garbage. These hogs gave preference to the middlings and ate less garbage than the others, but took on no more weight than the hogs fed on garbage alone.

HINTS FOR THE CONTRACTOR

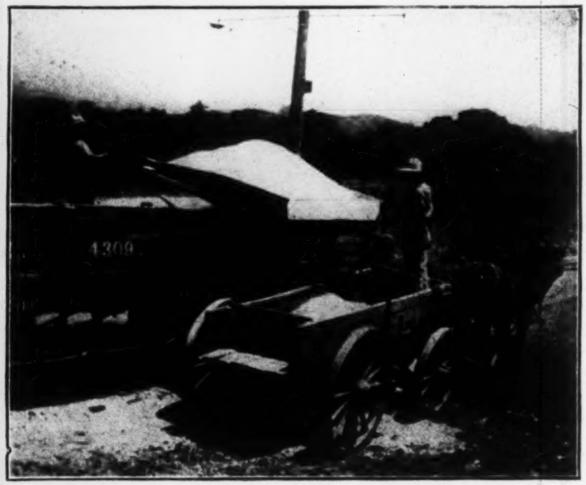
DETAILS WHICH SAVE TIME AND LABOR ON CONSTRUCTION WORK

Serviceable Unloading Box for Highway Work Cost Ten Dollars Complete

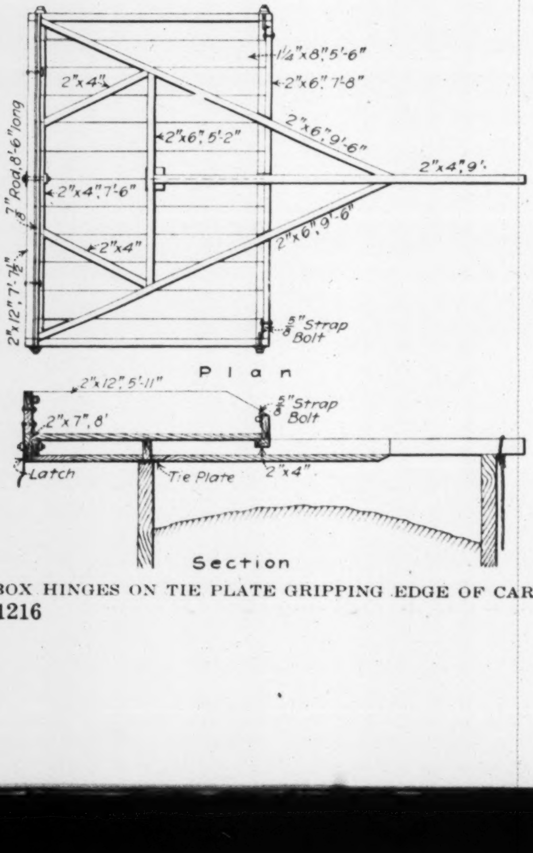
By E. Earl Glass

Monrovia, Calif.

An unloading box designed and used successfully in handling highway materials by the writer is shown in the illustrations. The box cost but $10 for material and labor, and contains only 145 ft. B. M. of lumber. The hardware for it was easily made. It has a hinged door at the front edge and revolves around the near edge of the car on a tie plate as shown in the drawing. This plate keeps it from slipping when tilted.



BOX CONTAINS ONLY 145 BOARD FEET OF LUMBER



BOX HINGES ON TIE PLATE GRIPPING EDGE OF CAR

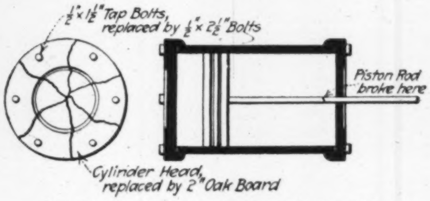
For security against shoveling too much of the material along the front edge, the pole reaching across the car is tied down by a rope to the truss rods below. The box is so light that one man can easily move it along the edge of the car as the stone is removed, by lifting it and putting a small pipe blower under the middle sill. The frame weighs 140 lb. and is the heaviest part of the box when dismantled. On this account it is a simple matter for one to move the box from car to car, which operation does not occupy more than 20 minutes.

Oak Cylinder Head Enables Hoist to Run Until Repair Parts Come

By John G. Sullivan

Civil Engineer, Roos Bros., Cincinnati, Ohio

A concrete hoist on one of the groups of buildings of the East Side High School at Cincinnati was recently delayed but 35 min. as a result of a broken piston rod and smashed cylinder head. The rod broke on a return stroke of the engine, the momentum forcing the piston through the cylinder head. No spare parts were obtainable in Cincinnati, and as a matter of fact it required a week to get a new cylinder head and rod. The broken piston, however, was at once welded, and while this was being done the pieces of the cylinder head were put together and used as a template to make another one out of oak. The circle of bolt holes was laid out on a 2 x 10-in. oak plank, which was secured to the cylinder by using a new set of tap bolts one inch longer than the old ones.

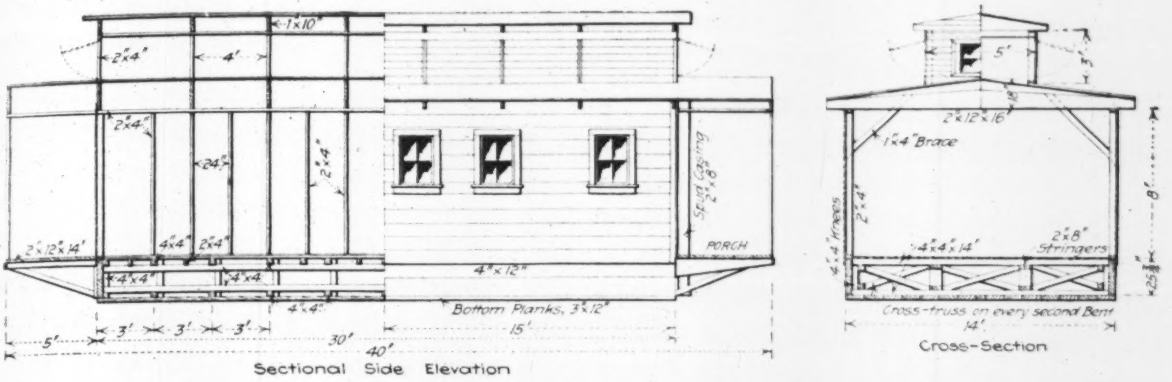

½"x1½" Tap Bolts, replaced by ½"x2½" Bolts
Piston Rod broke here
Cylinder Head, replaced by 2" Oak Board

OAK HEAD RAN THIRTY DAYS

The welded rod was replaced, and the oak cylinder head bolted on, so that the engine was again hoisting concrete within 35 min. of the accident. Although the new parts, which were ordered by wire, came within a week, they were not put on until a month later, when the welded piston rod broke again. In the meantime the makeshift cylinder head and the welded rod had raised something more than 1000 yd. of concrete.

House-Boats with Steel Bunks Used for Dredge Crews on Ditch Work

House-boats used as quarters for dredge crews by R. H. & G. A. McWilliams, of Chicago, on many of their contracts for drainage ditch excavations, are shown in the accompanying drawing. The force for a dredge consists ordinarily of a foreman, two dredge



SINGLE-DECK QUARTER BOAT FOR DREDGE CREWS ON DRAINAGE WORK

operators, two cranesmen, two firemen, a launchman and from two to four coal men and extra men.

The house-boats are built with either a one-story or two-story superstructure. In the former case, two boats are used, one for the crew's quarters and the other for the galley, mess room and cook's quarters. The one-story quarter-boat generally contains three rooms; a combined office and sleeping room for the foreman, a sleeping room for the two dredge operators, and a large room for the rest of the crew. In a two-story boat, the first floor contains the galley and mess room and the upper floor is for the crew's quarters. The bunks are of steel, of the double-deck type.

DOUBLE-DECK QUARTER-BOAT

The Kankakee River improvement on which this type of house-boat was used is described in this issue of *Engineering News-Record*, p. 1205.

Motor Truck Dumps Five Batches in Succession Into Mixer Skip

MOTOR truck bodies designed to hold sand and gravel for five 3-sack batches of concrete are being used in Thurston County, Washington, to supply the paving mixer on the concrete road work being done by the Independent Asphalt Paving Co., Seattle. The truck backs up to the loading skip of the mixer, dumps the first batch by opening the tailgate, and stands there while this batch is mixed. The hinged bottom door of the next partition is then released by pulling out a latch, which permits the second batch to slide into the skip of the mixer. When the second batch has been mixed the third is dumped, and so on, until the truck is empty. The sides of the body and of the partitions are built up 6 in. higher than is necessary to contain the sand and gravel in each batch, so that the measured charges cannot run from one compartment into the other while the body is standing in the dumping position. Each batch contains 6 cu.ft. of sand and 9 cu.ft. of gravel. The trucks in use are 3-yd. size, and are accurately loaded at charging bins at a central gravel-handling station.

Each truck takes from 9 to 10 min. to discharge all five of its batches at the mixer, which represents about 25% of the working time. The mixer crew, however, is so greatly reduced that this rather expensive method of unloading the trucks is much more than compensated, the contractor figuring that the wages saved are more than double the rental value of the truck for the idle time.

Moreover, none of the concrete material touches the subgrade, and in addition to the elimination of labor required for shoveling the sand and gravel up again, no material is wasted by being mixed with clay. According to the *Concrete Highway Magazine*, the total net saving in wages and material is estimated at $30 per day, or a little more than 5c. per sq.yd. of 6 to 8 in. concrete.

Roads a National Not a Local Question

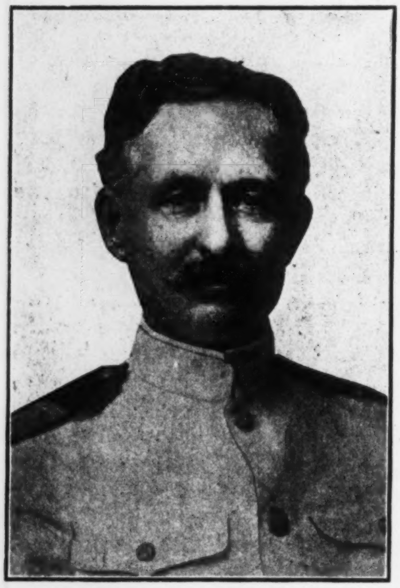
The only way we shall ever secure a proper road system will be by organizing a comprehensive and nationwide system of building, according to a statement by Major P. S. Bond in *Motor Life*. For this there must be a centralized Federal bureau, whose duty shall be to block out the location of roads and standardize details of construction with a view to national usefulness, both military and economic. Building the roads of the United States is a full-size undertaking, and should be undertaken on a full-size scale. It is too big a matter to be left to the judgment of ill-informed local authorities and the juggling of politicians, and it is too national in its importance to be a subject for local consideration only.

NEWS OF THE WEEK

CURRENT EVENTS IN THE CIVIL ENGINEERING AND CONTRACTING FIELDS

New Chief of Yards and Docks in Service Twenty Years

On Dec. 18, 1917, the President forwarded to the Senate the nomination of Charles Wellman Parks, a captain in the Corps of Civil Engineers, U. S. Navy, as Chief of the Bureau of Yards and Docks of the Navy, which position carries with it the rank of rear admiral. Rear Admiral Parks will succeed Rear Admiral Harris, who recently resigned as Chief of the Bureau of Yards and Docks to assume the duties of general manager of the Shipping Board, Emergency Fleet Corporation, from which position he resigned after about two weeks of service.



REAR ADMIRAL C. W. PARKS

Admiral Parks is 54 years of age, a native of Massachusetts. He is a graduate of the Rensselaer Polytechnic Institute, a school which has furnished the Navy with many of its civil engineers. He entered the Navy as a civil engineer July 19, 1897. His career in the Navy has been one of widely varied activity and increasing responsibility.

On Jan. 16, 1915, Admiral Parks was selected by the department as engineer in charge of the construction of the large naval station at Pearl Harbor, Hawaii, and in this position his chief responsibility has been the supervision of the construction of the large dry dock at that point, which has been regarded as the Navy's most difficult and important single piece of public works construction. Admiral Parks has had the satisfaction of virtually completing this work.

As chief of the Bureau of Yards and Docks, Admiral Parks will be in charge of the design and construction of the public works of the Navy, which include not only the upbuilding and maintenance of the diversified shore construction of the various navy yards and stations, but which also embrace the construction of barracks, hospitals, fuel oil stations, etc. His appointment is a recognition of his capacity as an engineer as well as an administrator.

Defense Council Reorganizes Coöperative Work

Committees of Industries Replaced by Specially Qualified Individuals

The Council of National Defense issued recently a statement which indicates that the Coöperative Committees of Industry, formed at the time war broke out, will be replaced by highly qualified individuals who will serve as Government employees and expert advisers and will ask the various industries to assist the Government by representative committees, created not by the Government but by the industries themselves.

While the Coöperative Committees of Industry have given faithful, patriotic and invaluable assistance to their country, many of the individuals serving on them have done so only at great personal and financial sacrifice, and were placed before the public in a position unfair both to themselves and to the Government, since they were called upon to act both as Government advisers and at the same time as representatives of the industry.

In dissolving the present Coöperative Committees of Industry, which were appointed by and under the direction of the National Defense Council, the action is taken with only the highest praise and thanks for the splendid, indispensable work of the various members and with the expressed hope that representative committees of the industries will be formed by the industries themselves at the earliest possible moment. The establishment of fresh committees, formed so as to entitle them to speak for their entire industries, will render immediately available valuable sources of information upon which the Government can draw in connection with the countless business and industrial problems attendant upon the conduct of the work necessary for the speedy and successful prosecution of the war.

The new arrangement will be far more workable from an administrative viewpoint than the old arrangement. It should prove a means for making permanent the mobilization of industry in a democracy at war. The type of organization which disappears on the issuance of this new order of the Council of National Defense is felt to have been perfectly satisafctory and adequate to the circumstances which arose when war was first declared and the country had to be taken over from a condition of peace to that of hostility.

To Study Stream Pollution

Bad tastes and odors in the water-supply of Charleston, W. Va., have led to the appointment of a committee, which will investigate the pollution of the Elk River and perhaps lead to a state-wide investigation of West Virginia streams. Two engineers are members of the committee: A. M. Scott, chairman, and Mayo Tolman, secretary. Mr. Tolman is also chief engineer of the State Department of Health. Since its appointment the committee has organized as the Kanawha Basin Sanitary Commission and has appointed subcommittees on engineering, education and legislation. It is expected that a full-time secretary, an engineer, will be appointed, his compensation to be paid by public subscriptions.

Cincinnati Increases Water Rates

Water rates in Cincinnati will be increased 25% beginning Jan. 1, 1918. The meter charge will be raised to 10c. instead of 8c. per 100 cu.ft., and the minimum charge of 30c. per month will be increased to 40c. The unmetered service will pay a straight 25% increase. For consumers outside of the city in unincorporated villages the meter rate will be 11c. per 100 cu.ft., with a 50c. minimum charge per month, and in incorporated villages the rate will be 12½c. per 100 cu.ft. J. A. Hiller, general superintendent of the waterworks department, estimates that the increases will produce additional revenue of about $120,000 per year.

Ordnance Department Wants One Hundred Draftsmen

One hundred draftsmen to fill positions in the Ordnance Department, paying from $800 to $1800 per year, are needed quickly. Civil service examinations for these positions will be held in Chicago, Jan. 8, 9 and 10. Positions will be permanent. Applications should be filed with Milward Adams, secretary of the Civilian Personnel Committee, Ordnance Department, at offices of the State Council of Defense, Chicago, Illinois.

Women To Supply Comforts to Engineer Regiments

An organization known as the Woman's Committee for Engineer Soldiers has been formed in Washington, D. C. Mrs. William M. Black, wife of Major General Black, Chief of Engineers, is president; Mrs. Charles Keller, vice president and chairman; Mrs. W. W. Harts, secretary, and Mrs. Ulysses Grant, 3rd, treasurer.

The object of the woman's committee is to see that no engineer soldier leaves this country without the proper knitted garments and to send garments to those already "over there." The national committee in Washington is to be headquarters for units all over the country and by purchasing yarn in large wholesale quantities should be able to get better prices and deliveries.

The dues are one dollar a year, and a very earnest appeal is made to every man and woman interested in the engineers of the Regular Army, National Army, the railroad, forestry, camouflage or labor regiments to join this organization or to send contributions of money for wool, or finished garments, to supply these hundred thousand men.

Address Mrs. William M. Black, 1730 I St., N. W., or Mrs. Ulysses Grant, 3rd, 2204 R St., N. W., Washington, District of Columbia.

Favor Retention of State Highway Engineer of New Jersey

Hearing that Robert A. Meeker, state highway engineer of New Jersey, had been asked to resign, the New Jersey State Association of Highway Engineers, at a meeting held on Dec. 12, unanimously adopted a resolution requesting the state highway engineer to retain Mr. Meeker in office. The arguments advanced for Mr. Meeker's retention were expressed as follows:

"Mr. Meeker has acted as state highway engineer for the past 17 years or more, making it practically his life work. In this time the state has passed through many phases of road building in experimentation and construction work, due to changing traffic conditions, and in this time Mr. Meeker has acquired a statewide knowledge of the roads and their needs, traffic conditions, local engineering problems and other phases of road building which is held by no other engineer, and which could only be acquired through similar long experience and many experiments.

"During past years the road department has been handicapped by poor legislation and lack of funds, in spite of which difficulties Mr. Meeker's work has been highly efficient, and it is our belief that under the present highway act Mr. Meeker will have unlimited opportunities to show his fine worth to the people of this state.

"In view of the great road building program now planned by the state, this association feels that Mr. Meeker's ability and knowledge render him peculiarly fitted to act as state highway engineer."

Secretary for Joint Activities of Big Societies

Alfred D. Flinn Selected—Has Had Broad Engineering, Executive and Organizing Experience

For economy of administration and the furtherance of coöperation among organizations representing the profession, the United Engineering Society, the Engineering Foundation and the Engineering Council recently decided to join in one suite of offices in the Engineering Societies' Building, New York City, and engage a joint secretary. For this position the engineer selected is Alfred Douglas Flinn, now deputy chief engineer of the Board of Water-Supply of the City of New York. This combination of the secretaryships of these three central bodies is looked upon as the first large fruit of the removal of the American Society of Civil Engineers to the Engineering Societies' Building, thus verifying the prediction made when that removal was proposed—that if accomplished it would lead to close coöperation of the leading engineering bodies.

Activities Joined

The United Engineering Society was formed some years ago by the National Societies of Civil, Mining, Mechanical and Electrical Engineers to coördinate joint activities and provide for holding property in common. This body acts as the holding company for the four founder societies and is landlord of the Engineering Societies' Building in New York, in which the founder societies have headquarters. In it also is vested the title to the library housed in the same building, which, with the recent addition of the collection of the American Society of Civil Engineers, is now the most important engineering library in the country.

The Engineering Foundation Board was created, as a department of the United Engineering Society, to administer the endowment made by Ambrose Swasey three years ago for the support of engineering research for the benefit of the profession and of humanity. The large sum of money he gave will form, it is hoped, the nucleus to which other gifts will be added.

The last of the three organizations which are to have a joint secretary is the Engineering Council. For years it has been recognized that there were certain activities affecting engineers which could not be properly handled by any one of the individual engineering professional societies. To meet this need there was created during the past summer the Engineering Council "for the proper consideration of questions of general interest to engineers and to the public, and to provide the means for united action upon questions of common concern to engineeers."

Mr. Flinn's Career

Mr. Flinn, in whom these secretaryships will be joined, was born in New Berlin, Penn., in 1869, and was graduated from Worcester Polytechnic Institute in 1893. In August, 1895, he became a member of the engineering staff of the Metropolitan Water-Works, Boston, and remained with that organization until 1902. He rose steadily until he became principal office assistant under the chief engineer, Frederic P. Stearns, in charge of designs on the Wachusett dam, Weston aqueduct and other structures coming under the authority of the Metropolitan system. During the latter years with this organization, he lectured on water-works and sewerage in Lawrence Scientific School, Harvard University.

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ALFRED D. FLINN

On leaving the Metropolitan Water and Sewerage Board, he became managing editor of the *Engineering Record* and continued in that capacity until August, 1904, when the position of general inspector of the Croton aqueduct commissioners was offered to him. He remained in that position for about a year, and upon the organization of the Board of Water-Supply of the City of New York, which was established in 1905 to build the new Catskill aqueduct and its appurtenant structures, he became department engineer in charge of the headquarters department. The magnitude of this assignment will be apparent when it is remembered that to that department were entrusted the design, preparation of contracts and specifications, inspection of materials, the researches and investigations for all of the structures of this $177,000,000 enterprise. Moreover, it involved the organization and equipment of the engineering forces of the board and the handling of a tremendous amount of detail connected with an enterprise of that magnitude.

He continued as department engineer until August, 1914, when he was made deputy chief engineer. He has continued in that capacity until his election to the secretaryships referred to in this article.

Mr. Flinn brings to the position a broad executive and organizing experience, as this brief biography indicates. He is especially successful in laying out large problems and in securing for their execution the hearty coöperation of his co-workers. The positions on which he enters require those qualities in a high degree, and this was the determining factor in Mr. Flinn's selection.

Mr. Flinn is a member of the board of direction of the American Society of Civil Engineers and chairman of its committee on library.

Vehicle Tunnel Under Hudson Favored by Commissions

Construction of a large size vehicle tunnel under the Hudson River connecting New York and Jersey City is recommended by special commissions of the States of New York and New Jersey, which have been considering the problem jointly and have just submitted reports to Governors Whitman and Edge respectively. Interstate commissions on bridges and tunnels have existed in both states for a number of years, but the New Jersey commission was put on a new footing last year by legislative action following a study of the Hudson River vehicle-tunnel project by the Public Service Corporation of New Jersey. The report of this study, known as the McCarter report, adopted a tunnel location from the prior report of Jacobs & Davies, who were consulting engineers for the Interstate Bridge and Tunnel Commission and some years ago reported a project for two parallel shield-driven tunnels each carrying one roadway. The McCarter report, however, abandoned the shield-tunnel method and recommended building the tunnel in a dredge trench in the river bottom by sinking separate sections built on the surface and joining them in place. Maj. Gen. George W. Goethals was appointed consulting engineer to the new joint commission and was directed to consider the tunnel plans previously submitted. In a report submitted to the commission recently, he uses the same location, a line from Canal and Varick Sts., New York, to 13th and Henderson Sts., Jersey City, but he rejects the trench method of tunnel construction as impracticable on account of the softness of the silt in the bottom of the Hudson River. He says: "The Hudson River silt overlies the rock as an unstable mass, affected by tidal fluctuations and temperature changes. It can be handled easily by dredges, but the very character of the material precludes the possibility of securing a trench of the dimensions required within a reasonable time and at a reasonable cost. The upper strata, in close proximity to the water, are in such a liquid state as to be set in motion by the passage of deep-draft vessels. To cut a deep trench across the tidal currents through material which reduces to a practically fluid state when water has access to it becomes a serious and difficult task." He therefore recommends the adoption of the shield method. As between a single tunnel or a pair of tunnels he advocates the single tunnel "made large enough to provide for slow trucking below and the faster, lighter motor cars above." The cost can be reduced by using concrete blocks molded as voussoirs of an arch or ring, properly keyed, in lieu of steel or cast iron. It is estimated that such a tunnel can be constructed at present market prices for material and labor for a sum not exceeding $12,000,000." With the submission of this report to the two commissions, an offer of John F. O'Rourke and associates to build the tunnel complete for $12,000,000 was submitted. It is understood that this proposal contemplates a tunnel of 42 ft. outside and 36 ft. inside diameter, driven by shield, formed of a concrete-block shell, and divided by a middle floor into upper and lower roadways, with ventilating chambers in narrow segments at each side.

The joint commissions last week adopted General Goethals' report and recommendations, and laid their conclusions before the governors.

Water Users Get Salt River Reclamation Project

Without celebration or even newspaper heralding, the Salt River Project of the United States Reclamation Service has been turned over to the Salt River Valley Water Users' Association. As the December *Reclamation Record* says, "Evidently the exchange of a property valued at $15,000,000 is not news in the valley, for nothing was printed about it." The event took place Nov. 1. A force of 400 engineers and other employees, under the immediate charge of W. S. Cone, project manager, were turned over in a body to John P. Orme, president of the association.

The project system as planned has been practically completed for some time, and on Jan. 18 Secretary of the Interior Lane issued the public notice announcing construction charges, irrigable lands, etc., in accordance with section 4 of the Reclamation Act. Negotiations between the Government and the association resulted in a contract, Sept. 6, by which the association assumes full management of the project works, including outstanding obligations and contracts, and repays the construction cost in 20 annual installments of 2, 4 and 6%. The first payment was due Dec. 1.

The association receives all income arising from operation and agrees to maintain the works in as good and efficient condition as when taken over, excepting only the depletion of storage capacity by natural silting and injury by public enemies or by the United States as a war measure, which shall suspend or postpone repayments. To secure proper maintenance the works are subject to inspection under the direction of the Secretary of the Interior, and his prior written consent is necessary before making any substantial change in the works. The association holds the United States harmless as to damages arising from operation and maintenance. It must operate in accordance with the requirements of law as well as the rules and regulations, past and future, issued thereunder by the Secretary of the Interior, and will use its powers to enforce these.

The association may terminate the agreement on Mar. 1 of any year by written notice a year before. The Secretary of the Interior may terminate it at any time if the association fails to carry it out, or if he reasonably believes the security for the Government's investment is being impaired.

When national reclamation began the association had 1000 farmers; now there are 3500. Some years 80,000 acres were watered before the construction of the famous Roosevelt dam storing 1,300,000 acre-feet, now bumper crops are raised on 200,000 acres, valued at $13,700,000. The net cost of the works as of June 30, 1917, was about $10,500,000.

Western Society Issues News Bulletin

"To serve as a medium of current thought and a chronicler of events worth while to its members" is the announced reason for the 8-page monthly bulletin recently started by the Western Society of Engineers. Another avowed purpose is "to knit together the engineers of this vast community into a forceful whole."

War has stirred the organization to its foundation, for 10% of its members and five of its 15 directors are in service. At a recent board meeting instructions were given to the program committee to book no addresses or papers that did not have to do with the war. After devoting the whole of a special meeting to the question of engineering students completing their courses, resolutions directed to the Secretary of War were passed, agreeing substantially with the ideas set forth in the editorial in *Engineering News-Record* of Nov. 29, p. 995.

Subjects having to do with the war, scheduled for the five weekly meetings beginning Dec. 3, are as follows: "Symposium on Cantonment Construction," C. B. Burdick, consulting engineer; Profs. N. B. Garver and A. C. Willard, University of Illinois; "What the War News Means," S. Duncan-Clark, *Chicago Evening Post;* "What the War Means to the Engineer," E. J. Mehren, vice president and editorial director, McGraw-Hill Publishing Co., Inc.; "The Relation of Science and Engineering to the War," Maj. Robt. A. Milliken, vice chairman and executive officer, National Research Council. At the annual meeting in January some phases of war's effect on railway valuation will be handled by Pierce Butler, general counsel for the Western carriers.

Chicago Engineers Help Ordnance Recruiting Committee

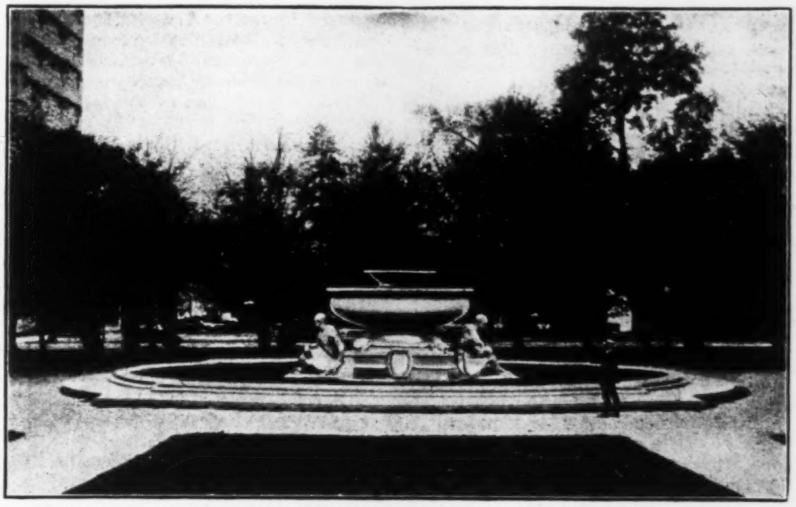
To expedite recruiting of Chicago's quota of the 9000 men required in the Ordnance Base Depot in France, an Ordnance Recruiting Committée of the Military Training Camps Association, made up largely of engineers, has been formed. From the Chicago district 2000 men are expected. The division will be a military organization, but at present men who are exempt from the National Army under the provisions of the selective service draft cannot be accepted. Men from 18 to 40, over or under draft age, or men of draft age not yet ordered into camp, may be accepted. Wives or other dependents are provided for—the wife receives one-half of husband's pay, plus $15 a month, plus $10 a month for one child, plus $5 a month for each additional child.

Men of almost every vocation are needed, particularly automobile repairmen, cooks, gunmakers, harness makers, machinists, millwrights, optical instrument repairers, painters, steel polishers, plumbers, etc. These men will be stationed back of the fighting front of the American Army in France in warehouses and repair shops.

Pay ranges from $30 to $61.20 per month. Enlistment is for the duration of the war as privates, but there is opportunity for promotion. A special recruiting station has been opened at 435 S. Dearborn St.

Alfred Noble Memorial Fountain Nears Completion

Accompanying is a view of the Alfred Noble Memorial erected by the American Society of Civil Engineers in Rawlins Square, Washington, south of the building of the Department of the Interior.



ALFRED NOBLE MEMORIAL SYMBOLIZES THE CHARACTER OF THE ENGINEER TO WHOM IT IS DEDICATED

A progress report on the work is presented by the memorial committee in the November "Proceedings" of the society. Quoting from the report, which was written before the work was so far advanced:

"After studying and discarding many compositions based on the above ideas, the models shown have been selected as combining best the features desired—a fountain befitting the site, and a memorial to an eminent engineer, symbolizing by its form and sculpture the character of the man and his life.

"The dominant architectural element is the large elliptical bowl, set on a solid base and flanked by the dominant sculptural element, two strong seated figures. The memorial will rise from a large basin of water, 37 ft. wide and 63 ft. long, surrounded by a wide stone coping.

"The sculptural figures are intended to show the strong elements in Alfred Noble's character—thought in preparation, force in execution. Each figure will hold a scroll upon which will be carved an example of the work by which Alfred Noble is so well known and appreciated."

Paul Bartlett is the sculptor for the memorial, Glenn Brown and Bedford Brown serving as his architectural advisers. The committee consists of Onward Bates, chairman; Maj. Hugh L. Cooper, Samuel Rea, Samuel H. Hedges, F. H. Newell, W. W. Harts and Charles Warren Hunt. Major Cooper succeeded Robert Moore, resigned.

Short Intensive Course Offered in Naval Architecture

The Massachusetts Institute of Technology will have, from Feb. 4 to May 24, a special intensive course in naval architecture, open to the graduates of technical schools and other persons having the same preparation. The course is under Professor Peabody, and is stated to give a good training in theoretical principles and in ship design. Students already registered at the Massachusetts Institute of Technology will pay for the special term $25 in addition to the regular tuition fee for the second term. Those who register for the interim course only will pay full tuition for a term, namely, $150. Further information on the course can be obtained from Prof. C. H. Peabody, department of naval architecture and marine engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Movement to Coördinate Ohio Engineering Societies

A conference to promote the coördination of all the engineering organizations of Ohio will be held at Columbus on Jan. 29, in Brown Hall, Ohio State University, with Prof. Clyde T. Morris as chairman. All the engineering societies of the state, including local sections of national organizations, are invited to send delegates. It is expected that a permanent organization will be formed, the business of which will be transacted by the Engineers' Club of Columbus. The date named was chosen because it is just before the opening of the annual meeting of the Ohio Engineering Society, at Columbus, Jan. 30, 31, and Feb. 1, thus saving a year's delay on the part of the society in the endorsement of the project. Officials of nearly all the engineering societies of Ohio have given evidence of hearty support of the movement.

Engineering Council Broadens Its Scope

At the meeting of the Engineering Council on Dec. 6, a report was adopted providing a method for electing to its membership engineering and technical societies other than the four national organizations to which representation is now restricted. The new rules go to the governing bodies of the four founder societies for their consideration.

Pittsburgh Transit Bureau Continued Another Month

The expected report on rapid transit in Pittsburgh is to be completed about Jan. 15, 1918, and in order to finish the work the Transit Bureau will be continued during January, according to a recent resolution by the city council. The bureau, headed by E. K. Morse, was formed a year ago for the purpose of studying Pittsburgh transit and reporting on it by 1918. A recent statement by Mr. Morse to the council's finance committee indicates that he will recommend immediate construction of rapid-transit lines.

New England Water-Works Association Election

At the annual meeting of the New England Water-Works Association, to be held in Boston, Jan. 9, there will be an election of officers. The polls will close Jan. 9, at 2 p.m.

Confer on Garbage Piggeries at Chicago

Discuss Sanitary and Economic Phases of Garbage Feeding To Utilize Wastes

Realizing that the public is now in a receptive mood for education in the utilization of garbage to the full extent possible and that one of the means to that end now being proposed to city officials is to add to the municipal garbage piggeries now in existence, I. S. Osborn, in charge of the division of wastes disposal of the Federal Food Administration, held a conference on the subject in Chicago, Dec. 7. There were present twenty-five sanitary engineers, health officers, superintendents of piggeries, both municipal and private, meat packers and officials of the Department of Agriculture, Bureau of Animal Husbandry.

Mr. Osborn explained that it was his purpose to obtain for Mr. Hoover the best information on feeding garbage to hogs as an economical and practical method of waste utilization. The hoped-for result would be to increase the meat and fat supply and to decrease the cost of garbage disposal. Feeding has had a checkered career, due, in his estimation, to mismanagement and lack of knowledge. The Food Administration is desirous of educating the public and promoting only what will prove to be a success.

Thomas Horne, Worcester, Mass., explained the conditions of feeding on the Worcester farm (see *Engineering News-Record*, Aug. 30, p. 398). The 1917 figures of operation are now available, as his year ended Nov. 30. There was sold $51,800 worth of pork raised on 65,014 tons of garbage. The cost (after collection) at the farm was $2.30 per ton, leaving a net pork value of $5.66 per ton for the garbage delivered at the farm. Mr. Horne values the equipment at $67,000, itemized as of Nov. 30, as follows: 40 acres land, at $100, $4000; buildings and platforms, $20,000; 2096 hogs, $42,000; miscellaneous, $1000.

The garbage of Grand Rapids is collected and loaded on cars by the city. Alvah H. Brown ships it every day 27 miles to his 80-acre farm in an isolated section, located on sandy soil. He pays 45c. per ton for freight and 25c. to the city. He feeds inside a long building, on concrete platforms, onto which garbage is dumped directly from the cars. Glass from electric-light bulbs are the worst "foreign" matter in garbage. Sheep and cattle have also been fed garbage in winter, but not in summer. Corn silage is fed on Sundays and a cheap "fire sale" grain is usually part of the bill of fare. Platforms are cleaned daily of manure, which is composted nearby.

Mr. Brown believes that hogs could be fed without nuisance in a building within the city limits if proper attention were given to ventilation. One ton will feed 100 pigs. He employs 12 men to care for 6000 hogs. Hotel garbage is worth ten times as much as household garbage, in his estimation. Cooking is not desirable, as it reduces the garbage to a slop in which the pig gets no chance to discard grapefruit and things which do not agree with his digestion. All feeders agreed that cooking is a mistake for household garbage. For hotel wastes, rich in recoverable fats, it is practical. Mr. Brown gets daily 500 lb. of bones worth 1c. a pound. In October 1015 tons of garbage were fed.

Peter Gibson, St. Louis, collects from 600 houses and gets coöperation by telling the householder something of the feeding business and, therefore, the desirability of separating the glass, cans and coffee grounds from the garbage. Letters on the subject left by the collectors aided in eliminating 75% of the difficulties from these causes.

Dr. Charles V. Chapin, health commissioner, Providence, said that garbage handling, as ordinarily practiced in Northern cities, was not a sanitary problem, but one of economics and convenience.

Dr. E. A. Cahill, Massachusetts Bureau of Animal Industries, was emphatic in his warnings to go slow in promoting feeding until plenty of safeguards against disease and its spread were known and observed. In his opinion, there were serious doubts as to whether the food values salvaged in this way would not result ultimately in a decreased meat supply due to increased cholera and other diseases disseminated by this means. The garbage-fed hog eats infected material (uncooked pork scraps from uninspected animals) all the time, while the grain-fed hogs are rarely exposed. A piggery can be kept immune, but it is a difficult and scientific problem to do it continually.

Doctor Wells, of the C. O. Bartlett & Snow Co., indicated that experiments are under way to produce a dessicated garbage for stock food. A firm in Pasadena now dries garbage to 18% moisture by the old Anderson process and sells the product as chicken feed.

The results of the conference and other information will be digested by Mr. Osborn's bureau and then made available.

Production of Bituminous Coal Reaches High Rate

The November production of bituminous coal was, with one exception, the largest in any month in the history of bituminous coal mining in America. A preliminary estimate placed the output at 47,747,000 net tons. January, 1917, recorded 47,788,000 tons, but in 26 working days as against 25, or 25.5, for November.

The average production per working day during the month was 1,872,432 tons. The November rate has been exceeded only once in the last two years, when in February, 1916, the average production per working day rose to 1,882,771 tons.

Index to This Volume

The index to the present volume (Vol. 79) of *Engineering News-Record* will be published with the issue of Jan. 10. Subscribers who bind their copies should make a point of detaching the index from that issue.

City-Manager Plan Upheld by New York Court

The optional city government statute of 1914, under which Niagara Falls and Watertown, N. Y., adopted the city-manager plan, was declared constitutional by the New York State Court of Appeals on Dec. 21, reversing the decision of the lower court.

ENGINEERING SOCIETIES

Calendar

Annual Meetings

AMERICAN SOCIETY OF CIVIL ENGINEERS, 29 West 39th St., New York; Jan. 16 and 17, 1918, New York; Charles Warren Hunt, secretary.

AMERICAN INSTITUTE OF CONSULTING ENGINEERS, 35 Nassau St., New York; Jan. 14, New York; F. A. Molitor, secretary.

NEW ENGLAND WATER-WORKS ASSOCIATION; 715 Tremont Temple, Boston; Jan. 9, Boston; Willard Kent, secretary.

AMERICAN WOOD PRESERVERS' ASSOCIATION; Baltimore, Md.; Jan. 22-24, Chicago; F. I. Angier, Baltimore & Ohio R.R., Mount Royal Station, Baltimore, Md., secretary.

CANADIAN SOCIETY OF CIVIL ENGINEERS; Montreal; Jan. 21-23, Montreal; Fraser S. Keith, 176 Mansfield St., Montreal, Can., secretary.

AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS; Dec. 27-29, Chicago; C. K. Shedd, Ames, Ia., secretary.

AMERICAN CONCRETE INSTITUTE; 27 School St., Boston; Feb. 7-9, Chicago; H. B. Alvord, secretary.

The Engineers' Club of Dayton held its regular midmonthly meeting Dec. 18, the lecturer of the evening being Prof. A. W. Smith, of the Ohio State University, Columbus. His subject was "Modern Conceptions of Electricity and Heat," and brought out the latest phases developed by laboratory research.

The Kansas City Chapter of the American Society of Heating and Ventilating Engineers, at its November meeting, discussed the subject of "Wind Leakage and Its Effect on Heating and Ventilating," as presented by H. W. Whitten. Suggestions on fuel conservation were made by P. W. Thomas, fuel engineer of the Central Coal and Coke Company.

The eleventh annual meeting of the **Kansas Engineering Society** will be held at Lawrence, Jan. 15-16. While the society has lost a good many active members, who have joined the army, the new highway law has furnished it with a good many county engineers. The program has not yet been completed, but there will be a paper from one of the instructors from the engineer officers' training school at Ft. Leavenworth; one from one of the cantonment construction force from Camp Funston; one from a member of the engineering force of one of the large oil companies and one from the Cement Gun Company.

The **Engineers' Subdivision** of the **Chicago Association of Commerce** on Dec. 19 elected the following officers: Chairman, G. R. Brandon; vice chairman, W. W. DeBerard; members of executive committe, J. N. Hatch, E. T. Perkins and W. M. Kinney.

The newly formed **Washington, D. C., Chapter of the American Association of Engineers** elected Dec. 14 the following officers: President, F. R. Weller, consulting engineer; vice presidents, A. S. Grossberg, chief designer, Bureau of Yards and Docks, and Harry Stevens, consulting engineer; corresponding secretary, Capt. D. S. Hays; recording secretary, A. P. Connor; treasurer, O. M. Sutherland. Major Zimmerman, of the Engineers' Depot, addressed the chapter on the foreign experiences of engineers. This meeting was attended by 150 engineers, including Admiral F. R. Harris, then chief of the Emergency Fleet, Admiral Baird and Major Harrison. The chapter numbers more than 100 and has headquarters at 502 Hibbs Building.

The **Engineers' Club of Oakland, Calif.**, at an election held Dec. 12 elected the following officers: President, R. S. Chew; vice president, R. M. Henningsen; secretary, Romaine Myers.

The Municipal Engineers of the City of New York held a meeting Dec. 26, at which a paper on "Architectural Design of Subway and Elevated Stations" was presented by F. J. Vickers, designing architect, Public Service Commission. The paper was illustrated by lantern slides.

At the annual meeting of the **Engineering Society of York, Penn.**, held recently, the following officers were elected for the ensuing year: President, James Rudisill; vice president, Chauncey D. Bond; secretary, M. Haller Frey; treasurer, Harold A. Russell; directors, George A. Jessop, Charles L. Berger, Howard J. Longenecker.

The Ohio Engineering Society will hold its annual meeting at Columbus Jan. 30 to Feb. 1. Part of the time will be devoted to a joint meeting with the Ohio Good Road Federation and the County Commissioners' Association.

A Reorganization of the Waco, Tex., Society of Architects and Engineers has been effected, and the following officers have been elected for the year: President, E. M. Ross; first vice president, R. J. Potts; second vice president, F. L. Booth; secretary-treasurer, Roy E. Lane.

At the annual meeting of the **Brooklyn Engineers' Club**, held Dec. 20, the following officers were elected for the coming year: President, G. Laurence Knight; secretary, Joseph Strachan; treasurer, Carroll S. Dunphe; directors, Calvin C. Hough and H. P. Quick; auditing committee, J. Barth Cronin, Andrew Nicola and E. M. Van Norden.

PERSONAL NOTES

J. D'Esposito, principal assistant engineer of the Pennsylvania Lines, at Chicago, has gone to the Emergency Fleet Corporation at Washington, being assigned to help Mr. Heyworth, who is in charge of the program for construction of wooden ships.

D. S. Bennett, structural engineer in reinforced concrete, Wausau, Wis., and the only engineer member of the last Wisconsin legislature, has received a commission as first lieutenant in the Signal Corps. Lieutenant Bennett is a veteran of the Spanish-American war, having served as sergeant major in the First Squadron, Third United States Cavalry.

N. D. Brainard, superintendent for the Austin Co., industrial engineers and builders, who was formerly at Baltimore, is now at Buffalo, New York.

J. G. Scrugham, state engineer of Nevada, has been commissioned a major in the Ordnance Department of the National Army, and will resign his position as state engineer.

G. T. McClean, city engineer of Astoria, Ore., recently received a leave of absence for 100 days, granted by the City Council, so that he may attend an engineers' training camp.

Waldo S. Coulter, until recently of the firm of Hansen & Coulter, New York, which was dissolved, has opened offices in the Engineering Building, New York, as a consulting, designing and supervising engineer.

E. L. Hill, recently appointed assistant to the general manager of the Erie R.R., with headquarters at New York, was formerly assistant in the engineering department of the Erie at New York.

Charles H. Ewing, who has been appointed vice president of the Philadelphia & Reading Ry., with headquarters at Philadelphia, was the general manager of the railway before his recent appointment. He was born in Chester County, Pennsylvania, May 26, 1866, and entered railway service in August, 1883, as rodman with the engineer corps construction department of the Philadelphia & Reading. After serving the road as transitman, assistant engineer in charge of construction and maintenance, roadmaster and division engineer, he went to the Central New England Ry. as chief engineer in 1893. He returned to the Philadelphia & Reading Ry. in July, 1902, as division engineer of the Reading & Lebanon Division, and in June, 1905, he became engineer, maintenance-of-way, with headquarters at Reading. In 1910 Mr. Ewing became superintendent of the Atlantic City R R., and on Jan. 1, 1913, general superintendent of the Philadelphia & Reading. In March, 1916, he was promoted to the position of general manager.

Paul Kircher, until recently connected with the Universal Portland Cement Co., as engineer in the promotion bureau, is now office engineer of the C. F. Massey Co., Chicago.

Charles A. Clark, recently assistant superintending engineer of Vermilion County, Illinois, bond issue roads, is now with the Kansas City division of the Portland Cement Association.

George G. Anderson, consulting civil engineer, Los Angeles, recently resigned from the advisory board of consulting engineers for the Imperial Irrigation District, California.

Nathan C. Rockwood, formerly assistant editor of *Engineering News*, has been appointed editor of *Rock Products*, published in Chicago. Mr. Rockwood has been engaged for several months in compiling an index to *Engineering News*, from 1910 to 1917.

William A. Royce, who was city engineer of Traverse City, Mich., until recently, resigned and is now mining engineer for the Round Valley Tungsten Co., Bishop, California.

George C. Love has moved his office and residence from Pineola, N. C., to Newland, N. C., and will continue in the practice of civil engineering at the latter place.

J. Duncan Jacques has resigned his position as assistant chief of construction with the New Jersey Zinc Co., of Pennsylvania, and has been appointed division engineer with the Department of City Transit, Philadelphia, in charge of subway construction.

OBITUARY

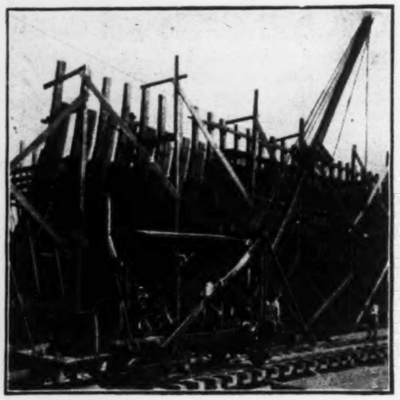
A. J. La Tornell, formerly city engineer at Edmonton, Alberta, is dead of wounds received while fighting in France recently.

H. D. Langworthy, superintendent of the water-works of Macon, Ga., died at his home there, Dec. 11. Mr. Langworthy went to Macon six years ago from Kansas City. He designed Macon's new water plant and supervised the construction of the water mains to Camp Wheeler. He was thirty-three years of age.

BUSINESS NEWS

Byers Auto-Crane Builds Ships

In the accompanying view is shown a typical example of how the material is handled on wooden ship construction in several of the new yards now being operated to capacity. The crane is a model C "Auto-Crane" made by the John F. Byers Machine Co., Ravenna, Ohio, equipped for the work with a 40-ft. boom. Such a machine is self-driven, runs on a standard-gage track alongside the shipways and can handle seven tons on an 18-ft. boom length. This particular machine is in use at the Bagdad Shipbuilding Co., Pensacola.



SELF-RAISING CRANE ON WOOD SHIP CONSTRUCTION

The Contractors' and Builders' Show, successor of the former annual cement show, planned to be held in Chicago, Feb. 6 to 13, has been postponed on account of the unsettled conditions in the building field.

The Belmont Iron Works, 22nd St. and Washington Ave., Philadelphia, Penn., is preparing a calendar for 1918, which gives illustrations of the Belmont Iron Works products, and which is sent free to anyone interested.

D. M. Ferguson, formerly of the National Transit Co., Oil City, Penn., is now director of publicity for the American Steel Exports Co., New York.

George H. Tefft, for 15 years secretary and sales manager for the W. S. Dickey Clay Manufacturing Co., has been made secretary and general manager of the Clay Products Association, Chicago, which is the successor of the International Clay Products Bureau, Kansas City. Mr. Tefft was secretary of the latter organization, in addition to his company duties. The Clay Products organization is composed of 30 leading manufacturers of clay products, including sewer pipe and blocks, wall coping, drain tiles, fireplace flumes and chimney pipes. The association has opened offices in the Chamber of Commerce Building, Chicago. Besides Mr. Tefft the officers are L. G. Blackmer, president, and W. D. Gerber, consulting engineer. The purpose of the association is to promote the use of clay products and to maintain high standards of manufacture. It will maintain physical and chemical laboratories and will cooperate with the American Society for Testing Materials in work relative to clay products.

The Southern Canada Power Co., Montreal, which supplies light and power to 47 cities and municipalities in western Quebec and controls five developed and six undeveloped sources of water power, has elected W. C. Hawkins as president. Mr. Hawkins is well known in the United States in connection with public utilities. He went to Canada in 1903 to manage the Dominion Power and Tramways Co., Hamilton, Ontario.

William L. Guenther, vice president of J. Jacob Shannon & Co., Philadelphia, died Dec. 15, in his 47th year. He was connected with the company for about 27 years.

Notes from

MAKERS OF PLANT AND EQUIPMENT

The Universal Motor Co., Oshkosh, Wis., has just completed a two-story addition to its plant, 40 x 180 ft. in plan. This new edition, of reinforced concrete, contains a department for testing marine motors and generating sets. The call for these generating sets by the Government has been so urgent that the works are pretty nearly filled up with the task of supplying 4-kw. units powered with a 4-cycle, 4-cylinder, 2⅝ x 4-in. gasoline motor.

The Pulsometer Steam Pump Co. has established new executive offices in the Candler Building, 220 West 42nd St., New York City. The company is enlarging its factory at Irvington, N. J., approximately 125 per cent.

The Dry Milling Engineering Co., Denver, Colo., which was recently incorporated, has been appointed Western agent for the Raymond Bros. Impact Pulverizer Co., Chicago. The head of the former concern is William B. Senseman. This company represents also the Buckeye Dryer Co., London, Ohio; the Dust Recovering and Conveying Co., Cleveland, Ohio, and the Quigley Furnace Specialties Co., New York.

The George W. Ziegler Machinery Co., Pittsburgh, has become the active representative of the Ransome Concrete Machinery Co., in Pittsburgh, succeeding George W. Ziegler.

D. S. Bright has become district sales manager for the Concrete Steel Co., Cleveland, Ohio. He has been connected with the company for about three years, and before that was connected with the Pittsburgh Construction Co. and the Concrete Products Co., both of Pittsburgh.

The Asbestos Protected Metal Co., of Pittsburgh, is now represented in Georgia by J. F. Schofield's Sons Co., with offices at Macon.

APPLIANCES AND MATERIALS

Leaks Automatically Close with This Non-Calked Pipe-Joint Filler

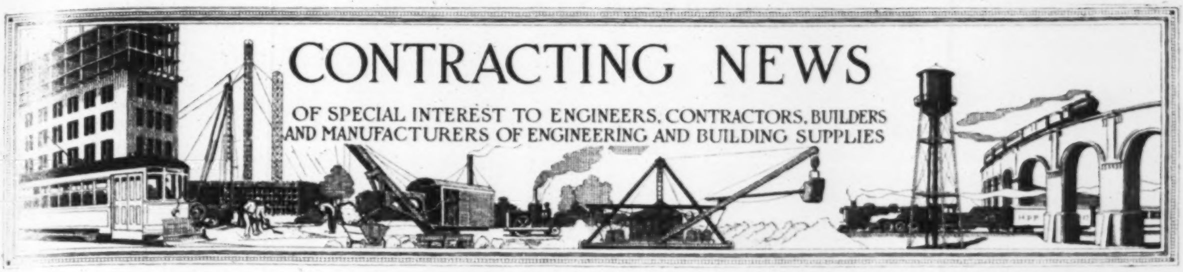
Metalium as a substitute for lead in joints of water mains is used by the Metropolitan Water District of Omaha, Neb. It is a metalloidal composition or alloy, which is melted and poured in the usual way. When ready to pour it is a thin, black, oily-looking liquid, but if made too hot it thickens and does not pour readily. A special furnace has been designed for melting it, but the ordinary lead furnace may be used if the grate area is reduced by firebrick and clay.

It is very important to have the bell and spigot of the joint thoroughly clean and free from oil or grease. For this reason nothing but unoiled jute yarn should be used for packing. At Omaha all lumps and blisters in the pipe coating of the bell and spigot are removed by a putty knife, and after the joint is yarned a loose strand of yarn is inserted to prevent the entrance of dirt before the filler is poured.

The joint runner may be of any form, and is smeared with wet clay before placing it around the pipe. The clay gate must be larger than for lead, and should be 6 or 8 in. high above the spigot. It is made by the aid of a conical wooden gate-peg 10 in. long, 2 in. in diameter at the bottom and 3 in. at the top. The bottom of this is inserted between the ends of the joint runner and clay is built up around it. The peg is then turned two or three times and withdrawn, leaving a well-formed gate of the proper weight. The metalium gate buttons can be remelted after being thoroughly cleaned and broken up.

The advantages claimed for metalium as compared with lead are low cost, a low melting temperature (about one-third that of lead), relatively high specific heat, a specific gravity about one-fifth that of lead, and the elimination of calking. Automatic closing of leaks by a self-calking property of this filler offsets its one disadvantage of liability to initial leaks. With lead at 13c. per lb. the saving per mile of pipe is given as $565 for 6-in. to $5160 for 48-in. pipe.

This joint filler has been used on about 50 miles of pipe from 3 in. to 48 in. in diameter and subject to pressures as high as 115 lb. For pipe over 24 in. in diameter a bestolyte lining is inserted before the filler is poured. The metalium is the invention of Homer V. Krouse, constructing engineer for the Metropolitan Water District of Omaha.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS
AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by **heavy type**; declines by *italics*.

IRON AND STEEL

PIG IRON—Below are the present quotations, with a comparison of a month and a year ago:

	June 29, 1917	One Month Ago	One Year Ago
CINCINNATI			
No. 2 Southern foundry....	**$47.90**	$42.90	$16.90 to 17.90
No. 2 Northern foundry....	....	43.00	19.76 to 20.76
NEW YORK			
No. 2X Northern foundry..	**50.25**	45.75 to 46.25	19.75 to 20.25
No. 2 plain Northern foundry	**49.25**	45.25 to 45.75	19.50 to 20.00
No. 2 Southern foundry†...	**49.25**	44.25	19.50 to 20.00
BIRMINGHAM			
No. Southern foundry....	**45.00**	39.00 to 41.00	14.00
CHICAGO			
No. 2 Northern foundry....	**55.00**	46.00	19.00
PITTSBURGH			
Bessemer iron*	**55.95**	45.95	21.95
Basic iron*	**50.00**	42.00	18.95

*These prices include the freight charge from the valley to the Pittsburgh district. †Delivered Tidewater, New York.

PIPE—The following discounts are for carload lots f.o.b. Pittsburgh, as per basing card of May 1, 1917:

Inches	Steel Black	Steel Galvanized	Inches	Iron Black	Iron Galvanized
BUTT WELD					
¾ to 3.......	49%	35½%	¾ to 1½......	38%	22%
LAP WELD					
2	42%	29½%	1¼	23%	8%
2½ to 6......	45%	32½%	1½	30%	16%
7 to 12......	42%	28½%	2	31%	17%
13 and 14....	32½%	....	2½ to 4......	33%	20%
15	30%	....	4½ to 6......	33%	20%
			7 to 12......	32%	19%
BUTT WELD, EXTRA STRONG PLAIN ENDS					
¾ to 1½.....	47%	34½%	¾ to 1½......	38%	23%
2 to 3........	48%	35½%			
LAP WELD, EXTRA STRONG PLAIN ENDS					
2	40%	28½%	1¼	24%	9%
2¼ to 4.......	43%	31½%	1½	30%	16%
4½ to 6.......	42%	30½%	2	32%	19%
7 to 8........	38%	24½%	2¼ to 4.......	34%	22%
9 to 12.......	33%	19½%	4½ to 6.......	33%	21%
			7 to 8........	27%	15%
			9 to 12.......	22%	10%

From warehouses at the places named the following discounts hold for steel pipe:

	Black			
	New York June 29, 1917	New York One Year Ago	Chicago	St. Louis
¾ to 3 in. butt welded........	38%	61%	43%	41.27%
3½ to 6 in. lap welded........	28%	64%	39%	37.27%

	Galvanized			
	New York June 29, 1917	New York One Year Ago	Chicago	St. Louis
¾ to 3 in. butt welded........	22%	36%	28%	26.27%
3½ to 6 in. lap welded........	10%	42%	25%	22.27%

Malleable fittings, Class B and C, from New York stock sell at 5 and 5% from list prices. Cast iron, standard sizes, 34 and 5%.

BARS, CONCRETE REINFORCING—The following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Shipment	Warehouse: New York June 29, 1917	New York One Year Ago	St. Louis	Chicago	San Francisco	Dallas
¾ and larger. ...	*	**$5.10**	$3.10	**$4.40**	$4.50	**$5.00**	**$4.75**
⅝	*	**5.15**	3.20	**4.54**	4.55	**5.05**	**4.80**
½	*	**5.20**	3.50	**4.59**	4.60	**5.10**	**4.85**
⅜	*	**5.35**	3.25	**4.74**	4.75	**5.25**	**5.00**
¼	*	**5.60**	3.85	**4.99**	5.00	**5.50**	**5.25**

*Mill quotations on actual specifications.

ROLLED FROM RAILS

	St. Louis	Dallas		St. Louis	Dallas
¾ in. and larger...	**$4.00**	**$4.75**	⅜ in.	**$4.25**	**$5.00**
⅝	**4.05**	**4.80**	¼	**5.00**	**5.25**
½	**4.10**	**4.85**			

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill, Pittsburgh	Warehouse: New York June 29, 1917	New York One Year Ago	Chicago	St. Louis	Dallas
¾ in. and larger....	**$5.25**	**$7.00**	$4.00	**$5.40**	$5.05	....
CONE HEAD BOILER						
¾ in. and larger....	**5.35**	**7.10**	4.10	**5.50**	5.15	$8.25
⅝ and 11/16..........	**5.50**	**7.25**	4.25	**5.65**	5.30	8.40
½ and 9/16..........	**5.85**	**7.60**	4.60	**6.00**	5.65	8.70

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotation from mill:

Blue Annealed	Large Lots, Pittsburgh	St. Louis	Chicago	San Francisco	New York June 29, 1917	New York One Yr. Ago
No. 10	**7.85**	**9.55**	**9.50**	**10.50**	**9.50**	4.25
No. 12	**8.10**	**9.60**	**9.55**	**10.55**	**9.55**	4.30
No. 14	**8.35**	**9.65**	**9.60**	**10.60**	**9.60**	4.35
Black						
Nos. 18 and 20..	**8.05**	**9.15**	**9.30**	**10.80**	**9.80**	3.45
Nos. 22 and 24..	**8.10**	**9.20**	**9.35**	**10.83**	**9.85**	3.50
No. 26	**8.15**	**9.25**	**9.40**	**10.88**	**9.90**	3.55
No. 28	**8.25**	**9.35**	**9.50**	**10.98**	**10.00**	3.65
Galvanized						
No. 10	**9.00**	Premium	9.75	....	....	4.50
No. 12	**9.10**	Premium	**9.85**	12.15	....	4.50
No. 14	**9.25**	Premium	**10.00**	12.15	**11.85**	4.50
Nos. 18 and 20..	**9.40**	Premium	**10.15**	12.45	**11.65**	4.80
Nos. 22 and 24..	**9.80**	Premium	**10.55**	**12.62**	**12.55**	4.95
No. 26	**9.95**	Premium	**10.20**	12.77	**12.70**	5.10
No. 28	**10.25**	Premium	**10.50**	**13.06**	**13.00**	5.40

STEEL RAILS—The following quotations are per ton f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh June 29, 1917	Pittsburgh One Year Ago	Chicago June 29, 1917	Chicago One Year Ago
Standard bessemer rails....	$38.00	$33.00	$38.00	$33.00
Standard openhearth rails..	40.00	35.00	40.00	35.00
Light rails, 8 to 10 lb.....	63.00	50.00	**68.00**	43.00
Light rails, 12 to 14 lb....	62.00	49.00	**67.00**	42.00
Light rails, 25 to 45 lb....	60.00	47.00	**65.00**	40.00

Note—Rerolled rails sell for same price as new light rails.

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh June 29, 1917	Pittsburgh One Year Ago	Chicago	St. Louis	San Francisco
Standard railroad spikes...	**$4.50**	$2.65	$5.00	$4.85	**$5.75**
Track bolts	**6.25**	3.25	6.25	5.05	**7.50**
Standard section angle bars	...	2.00	4.00	Premium	...

NAILS—The following quotations are per keg from warehouse:

	Pittsburgh	St. Louis	San Francisco	Dallas
Wire	**$4.00**	**$4.50**	$4.60	$4.25
Cut	4.65	**5.00**	6.15	....

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Pittsburgh	New York June 29, 1917	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in..........	*$4.50*	**$5.25**	$3.25	$5.05	$5.00	**$7.75**	**$6.00**
Channels, 3 to 15 in.......	*4.60*	**5.25**	3.25	5.05	5.00	**7.75**	6.00
Angles, 3 to 6 in., ¼ in. thick	*4.50*	**5.25**	3.25	5.05	5.00	**7.75**	6.00
Tees, 3 in. and larger......	*4.50*	**5.30**	3.30	5.05	5.00	**7.75**	6.00
Plates	**9.00***	**9.00**	4.00	6.55	7.00	**10.00**	9.00

*Price running wild. For prompt delivery from warehouse, $12.

New York extras on other shapes and sizes per lb. are as follows:

I-beams over 15 in..	$0.10
Angles over 6 in., on one or both legs.......................	.10
Angles, 3 in., on one or both legs, less than ¼ in. thick........	.70
Cutting to lengths, under 3 ft. to 2 ft. inclusive..............	.25
Cutting to lengths, under 2 ft. to 1 ft. inclusive..............	.50
Cutting to lengths, under 1 ft..............................	1.55

No charge is made for cutting to lengths 3 ft. and over.

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York June 29, 1917	New York 1 Yr. Ago	St. Louis	Chicago
Galvanized	10—2½%	25—2½%	*10—2½%*	10—2½%
Bright	20—2½%	35—2½%	*20—2½%*	**15—2½%**

EXPANDED METAL LATH—Prices per 100 yd. for painted are as follows:

Carlod

Gage	Weight	New York June 29, 1917	New York One Year Ago	Chicago	St. Louis	Dallas
27	233	$31.00	$16.00	$28.00	$30.00	$29.00
26	250	32.03	17.00	29.00	32.00	....
25	300	33.13	18.00	30.00	....	....
24	340	34.25	19.00	31.00	35.00	33.00
22	450	36.44	22.00	....	....	....

About 10% additional for smaller quantities.

MANILA ROPE—For rope smaller than ⅝-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅝-in., 8 ft.; ¾-in., 6; ⅞-in., 4½; 1-in., 3⅓; 1¼-in., 2 ft. 10 in.; 1½-in., 2 ft. 4 in. Following is price per pound for ⅝-in. and larger, in 1200-ft. coils:

Boston	**$0.32½**	Kansas City	**$0.31½**
New York	**.31¼**	New Orleans	**.31**
Cincinnati	.29	Los Angeles	**.31½**
Denver	.34	St. Paul	**.31½**

CLAY DRAIN TILE—The following prices are per 1000 lin.ft.:

	New York					
Size, In.	June 29, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$22.50	$18.40	$15.00	$24.00	$19.80
4	51.00	32.50	20.70	18.00	31.50	28.10
5	65.00	47.50	28.75	23.00	45.50	....
6	90.00	57.50	40.25	27.00	63.00	45.95
8	130.00	97.50	74.75	55.00	105.00	82.75

WATER TREATMENT CHEMICALS—Prices per lb. in New York are as follows:

Sulphate of alumina (iron free)	$0.045	(in 400-lb. bbl.)
Hypochlorite of lime	.03	(in 700-lb. drums)
Soda ash	.04	(in 400-lb. bbl.)
Liquid chlorine	.175	f.o.b. Niagara Falls

Lime is quoted separately, on next page.

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	**$30.00**	....
New York	Mexican	19.00	$14.00
Chicago	Mexican	24.00	20.00
St. Louis	Texaco or Mexican	22.50	19.50
San Francisco	California	14.50	12.00
Dallas	Texaco and Mexican	**22.00**	....
Denver	Trinidad	45.00	....
Denver	California	27.00	....
St. Paul	Trinidad	25.40	....

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York						
Size, In.	June 29, 1917	One Year Ago	St. Louis	New Orleans	Denver	Los Angeles	Dallas
3	.111	.07	....	.0448	.075	.055	.096
4	.111	.07	....	....	...	...	.096
5	.1665	.112	....	.07	.16	.09	.144
6	.1665	.112	.12	....	...	...	.144
8	.255	.154	.165	.1305	.225	.16	.2125
10	.3885	.224	.23	....	...	...	.2975
12	.4995	.28	.33	.2465	.375	265	.3825
15	.666	.278	.50	....	...	...	.5525
18	.925	.532	.75	....	...	...	.7225
20	1.11	.63	.90	....	...	...	.85
22	1.48	.84	1.13	....	...	...	1.105
24	.665	.91	1.28	.975	1.25	1.00	1.275
27	2.47	1.62	1.30	....	...	...	....
30	2.736	1.98	1.70	....	...	...	..
33	3.60	2.57	2.25	....	...	...	....
36	4.10	2.87	2.50	....	2.50	...	....

	Kansas City	Cincinnati	Boston	St. Paul
3	.10	.09	.114	**.085**
5	.135	.14	.171	**.1325**
8	.18	.2325	.266	**.1325**
12	.36	.44	.513	**.32**
24	1.35	1.88	1.71	**1.15**
36	3.25	...	4.2025	**3.00**

HOLLOW TILE—Hollow building tile price per block in cents:

	New York					
	June 29, 1917	One Year Ago	St. Louis	Dallas	New Orleans	Los Angeles
4x12x12	$0.0925	$0.065	$0.054	$0.07	$0.085	$0.055
6x12x12	.1295	.091	.066	.09	....	....
8x12x12	.15725	.11	.09	.12	.135	.10
10x12x12	.185	.13	.15	.15	....	....
12x12x12	.23125	.1625	.18	.18	.18	.165

	Denver	St. Paul	Kansas City	Cincinnati	Boston
4x12x12	....	**$0.056**	**$0.0595**	**$0.058**	$0.0957
8x12x12	$9.00*	**.104**	**.1125**	**.104**	.171
12x12x12	....	**.14**	**.1575**	**.145**	.2266

*Ton.

EXPLOSIVES—Price per pound in small lots at cities named:

	Low Freezing	Gelatin			Black	
	20%	40%	60%	80%	Powder*	Fuse†
New York	......	$0.24½	$0.29½	......	....	....
Boston	......	......	.31¼	.35	....	....
Kansas City	$0.17	.23¼	.28¼	.34½	....	....
New Orleans	.18¼	.22¼	.27¼	......	....	....
Los Angeles	*.19*	*.25*	*.31½*	......	....	....
St. Paul	.17	.23¼	.28¼	.34½	....	....
St. Louis	.14¼	.20⅓	.25½	.31¾	$1.85	$5.80
Denver	.16	.20	.25	.33	....	....

*Price per keg. †1000 ft.

ROAD OILS—Following are prices in tank cars 8000 gal. minimum f.o.b. places named:

New York, 40-50% asphalt	6½c. gal.
New York, 60-70% asphalt	7c. gal.
New York, dust layer	7¼c. gal.
New York, binder	8½c. gal.
St. Louis, asphalt	5c. gal.
Dallas, 40-50% asphalt	6c. gal.
Dallas, 60-70% asphalt	7½c. gal.
San Francisco, 75-95% asphalt	$1.83 bbl.

Note—Barrel or 42 bulk gal.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.
New York	3½	16	$[illegible]
New York	4	16	[illegible]
Chicago	4	16	1.90
Chicago	City specifications		2.10
St. Louis	3½	16	[illegible]
Boston	4	20	[illegible]
Cincinnati	4	16	[illegible]
Kansas City	4	16	[illegible]
St. Paul	Minneapolis specifications		[illegible]

LINSEED OIL—These prices are per gallon:

	New York		Cleveland		Chicago	
	June 29, 1917	One Year Ago	June 29, 1917	One Year Ago	June 29, 1917	One Year Ago
Raw in barrels	*$1.26*	$0.71	*$1.28*	$0.73	*$1.29*	$0.[illegible]
5-gal. cans	*1.36*	.81	*1.38*	.83	*1.34*	[illegible]

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red				White	
	June 29, 1917		1 Year Ago		June 29, 1917	1 Yr. Ago
	Dry	In Oil	Dry	In Oil	Dry and In Oil	Dry and In Oil
100-lb. keg	**13.25**	**13.50**	10.50	11.00	**13.00**	10.50
25- and 50-lb. kegs	**13.50**	**13.50**	10.75	11.25	**13.25**	10.75
12½-lb. keg	**13.75**	**14.00**	11.00	11.50	**13.50**	11.00
1- to 5-lb. cans	**15.25**	**15.50**	12.50	12.50	**15.50**	12.50

ROOFING MATERIALS—Prices per ton f.o.b. New York or Chicago:

	Carload Lots	Less Than Carload Lots
Tar felt (14 lb. per square of 100 sq.ft.)	$59.00	$60.00
Tar pitch (in 400-lb. bbl.)	**15.00**	**17.00**
Asphalt pitch (in barrels)	29.00	**30.50**
Asphalt felt	60.00	**62.00**

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York and Chicago:

	1-Ply		2-Ply		3-Ply	
	c.l.	l.c.l.	c.l.	l.c.l.	c.l.	l.c.l.
No. 1 grade	$1.15	$1.30	$1.45	$1.60	$1.75	$1.90
No. 2 grade	1.00	1.15	1.25	1.40	1.50	1.65

Asbestos asphalt-saturated felt (14 lb. per square) costs **$6.50** per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $1.85 per roll in carload lots and $2.10 for smaller quantities.

Shingles, red and green slate finish, cost $4.75 per square in carloads, $5 in smaller quanties, in Philadelphia.

LUMBER—Price per M in carload lots:

Square Edge and Sound Green

Timbers 5 x 5

	Southern Pine				Yellow Pine	
	New York		Chicago		St. Louis	
	20 Ft. and Under	22-24 Ft.	20 Ft. and Under	22-24 Ft.	20 Ft. and Under	22-24 Ft.
3x 4 to 8x 8	$35.75	$36.75	$33.75	$34.75	$30.75	$31.75
3x10 to 10x10	36.75	37.75	34.75	35.75	31.75	32.75
3x12 to 12x12	39.75	40.75	37.75	38.75	34.75	35.75
3x14 to 14x14	41.75	42.75	39.75	40.75	36.75	37.75
3x16 to 16x16	44.75	45.75	42.75	43.75	39.75	40.75
3x18 to 18x18	51.75	52.75	49.75	50.75	46.75	47.75
4x20 to 20x20	56.75	57.75	54.75	55.75	51.75	52.75

Over 32 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Prices from Lumberman's Bureau.

Yellow Pine—Dallas. Price per M:

2x4 to 2x12—12 to 16 ft. long	$32.50
2x4 to 2x12—10, 18 and 20 ft. long	35.00
2x4 to 2x12—22 and 24 ft. long	37.50
4x4, 4x6, 6x6, 8x8, 3x8	37.50
8x10, 10x10, 3x10	40.00
12x12, 3x12	40.00

Rough Douglas Fir, No. 1 Common—More than carload lots in San Francisco:

Size in Inches	15 Ft. and Under	16 to 24 Ft.	25 to 32 Ft.
3 and 4x4	$20.00	$21.50	$22.50
3 and 4x6 and 8	20.00	20.50	21.50
6x6 to 8x8	20.50	21.50	21.50
3 and 4x10	20.00	21.50	22.50
6 and 8x10	21.00	22.00	22.00
10x10	21.00	21.00	23.00
3 and 4x12	20.00	21.50	22.50
6 and 8x12	21.50	22.50	22.50
10 and 12x12	21.00	21.00	23.00
3 and 4x14	21.00	23.00	24.00
6 and 8x14	22.50	23.50	23.50
7 and 9x14	23.50	24.50	24.50
10 and 12x14	22.00	22.00	24.50

	1-In. Rough, 10 In. x 16 Ft. and Under			2-In. T. and G. 10 In. x 16 Ft.	
	Y.P.	Fir	Hemlock	Y.P.	Fir
Cincinnati	**$38.00**	....	....	**$36.00**	....
Kansas Citiy	43.25	**$44.50**	**$43.50**	43.00	....
Denver	....	34.00	....	....	$39.00
New Orleans	**38.00**	....	....	*30.00*	....
St. Paul	....	*51.00*	*33.50*	*59.00*	37.50

	3 x 8-In. x 20 Ft. and Under				12 x 12-In., 20 Ft. and Under	
	Y.P.	Fir	Hemlock	Spruce	Y.P.	Fir
Cincinnati	**$36.00**	....	....	....	**$40.00**	....
Kansas City	38.00	$35.00	$35.00	....	42.50	$35.00
Denver	....	40.00	....	36.00	....	44.00
New Orleans	*26.00*	....	....	....	*35.00*	....
St. Paul	....	**40.00**	**31.50**	**32.00**	....	**45.00**

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

June 29, 1917	One Month Ago	One Year Ago
$3.60 to 4.00	$3.60 to 4.00	$2.50

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York June 29, 1917	New York 1 Mo. Ago	New York One Yr. Ago	Birmingham	Chicago	St. Louis	San Francisco	Dallas
4 in.	**$68.50**	$58.50	$34.00	**$58.00**	**$68.50**	**$67.00**	**$72.60**	$68.00
6 in. and over	**65.60**	55.50	31.00	**55.00**	**65.50**	**64.00**	**69.30**	65.00

Gas pipe and 16-ft. lengths are $1 per ton extra.

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and vicinity, the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York June 29, 1917	New York One Month Ago
Heavy melting steel scrap	**$29.00**	$23.00 to 23.50
No. 1 railroad wrought	**50.00**	40.50 to 41.50
Stove plate	**22.00**	17.50 to 18.00
No. 1 machinery cast	**35.00**	29.00 to 30.00
Machine shop turnings	**21.50**	12.50 to 13.00
Cast borings	**22.00**	13.50 to 14.00
Railroad mallelable cast	**32.00**	24.00 to 24.50

	Chicago June 29, 1917	Chicago One Month Ago
No. 1 railroad wrought	**$44.00**	$36.00 to 37.00
Stove plate	**24.50**	18.00 to 19.00
No. 1 machinery cast	**32.00**	26.00 to 27.00
Machine shop turnings	**20.00**	14.50 to 15.00
Cast borings	**19.50**	14.00 to 14.50
Railroad malleable cast	**35.00**	26.50 to 27.00

	St. Louis June 29, 1917	St. Louis One Month Ago
Heavy melting steel scrap	**$44.00 to 46.00***	$29.00 to 30.00*
No. 1 railroad wrought	**40.00 to 41.00**	31.50 to 32.00
Stove plate	**22.00 to 23.00**	15.00 to 15.50
No. 1 machinery cast	**30.00 to 31.00**	21.50 to 22.00
Machine shop turnings	**18.50 to 19.00**	12.50 to 13.00
Cast borings	**16.50 to 17.00**	12.00 to 12.50
Railroad malleable cast	**27.00 to 28.00**	21.00 to 21.50

*Per gross ton.

TRIANGLE MESH REINFORCEMENT—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.89	$0.92	$0.93	$0.94	$1.06	$1.20
049	0.049	1.13	1.18	1.18	1.20	1.34	1.55
068	0.068	1.42	1.47	1.49	1.50	1.68	1.97
093	0.093	1.82	1.89	1.91	1.92	2.17	2.47
126	0.126	2.31	2.39	2.42	2.44	2.74	3.15
153	0.153	2.75	2.86	2.88	2.91	3.27	3.75
180	0.180	3.16	3.27	3.31	3.34	3.76	...
245	0.245	4.17	4.33	4.36	4.41	4.96	6.12
287	0.287	4.82	5.00	5.04	5.10	5.72	...
336	0.336	5.59	5.80	5.85	5.92	6.66	...
395	0.395	6.48	6.72	6.78	6.86	7.73	...

PLAIN 4-IN. x 8-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
036P	0.036	.69	.71	.72	.73	.82	...
053P	0.053	.97	1.01	1.02	1.03	1.16	...
072P	0.072	1.26	1.30	1.32	1.33	1.50	...
097P	0.097	1.62	1.68	1.70	1.71	1.93	...
049R	0.049	.97	1.01	1.02	1.03	1.15	1.97
067R	0.067	1.26	1.30	1.32	1.33	1.50	...
089R	0.089	1.62	1.68	1.70	1.71	1.93	...

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized runs about 10% higher than plain.

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Baltimore	15.4	Minneapolis	32.9
Boston	18.9	New Orleans	30.7
Buffalo	11.6	New York	16.9
Chicago	18.9	Pacific Coast (all rail)	75.0
Cincinnati	15.8	Philadelphia	15.9
Cleveland	10.5	St. Louis	23.6
Denver	68.6	St. Paul	32.9
Kansas City	43.6		

CEMENT, BRICK AND STONE

PAVING STONE—

		June 29, 1917
New York	Manhattan	$2.50 sq.yd.
	Other boroughs	2.25 sq.yd.
Chicago	About 4x8x4 dressed	2.25 sq.yd.
	About 4x8x4 common	1.80 sq.yd.
San Francisco	Basalt block 4x7x8	57.75 per M
Boston	5-in. granite	2.45 sq.yd.
Kansas City	Limestone	2.00 sq.yd.
Cincinnati	Granite	2.35 sq.yd.
St. Paul	Sandstone	27.00 per M

FLAGGING—

		June 29, 1917
New York	Bronx	$0.17 sq.ft.
	Manhattan	.17 sq.ft.
	Queens, 5 ft. square	.18 sq.ft.
Chicago	18 in. wide	.75 lin.ft.

CURBING—Prices per linear foot are as follows:

		June 29, 1917
New York	5 x 16	**$0.40**
	5 x 20	.45
Chicago	6 x 18	.60
St. Louis	5 x 16 square edge	**.74**
	5 x 16 bull nose	**.80**
San Francisco	5 x 16	.75
	5 x 20	.85

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel Paving	Gravel 1½ In. June 29, 1917	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. June 29, 1917	Gravel ¾ In. One Yr. Ago	Sand June 29, 1917	Sand One Yr. Ago
New York	$1.25	$1.25	$0.90	**$1.35**	**$1.00**	$0.50	$0.50
Chicago	1.40	1.40	.85	1.40	.85	1.00	.85
St. Louis	....	1.08	.70	1.08	.70	1.08	.60
Dallas	....	1.50	....	1.50	....	1.10	....
San Francisco	....	....	.75	....	....	....	.75
New Orleans	....	*1.85*	....	**2.00**	....	1.25	....
Los Angeles	....	.85	....	.85	....	.35	....
Denver	....	1.40	....	1.40	....	.95	....
Kansas City	....	2.00	....	2.25	....	.60	....
Boston	....	1.50	....	1.55	....	.80	....
Cincinnati	....	.90	....	.90	....	.90	....
St. Paul	....	1.00	....	1.10	....	.50	....

*Per ton.

Fine White Sand—St. Louis:

Pacific............$5.00 per ton Ottawa............$7.00 per ton

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. June 29, 1917	1½ In. One Year Ago	¾ In. June 29, 1917	¾ In. One Year Ago
New York	$1.10	$0.85	$1.25	$0.95
Chicago	1.40	1.10	1.40	1.10
St. Louis	**1.35**	1.00	**1.35**	**1.0[illegible]**
Dallas	*1.42*	....	....	....
New Orleans	**2.75**	....	4.00	....
Los Angeles	.95	....	1.00	....
Denver	1.40	....	1.40	....
Kansas City	**1.50**	....	**1.60**	....
Boston	**1.40**	....	**1.50**	....
Cincinnati	**1.05**	....	1.05	....
St. Paul	.80	....	1.00	....

LIME—Warehouse prices:

	Hydrated, per Ton Finished	Hydrated, per Ton Common
New York	$16.50	$13.25
Chicago	15.00	12.00
St. Louis	**12.00**	**10.75**
Dallas	20.00	15.00

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags:

	June 29, 1917	One Month Ago	One Year Ago
New York	$2.22	$2.22	$1.72
Jersey City	2.16	2.16	1.66
Boston	**2.77**	2.67	1.92
Chicago	2.31	2.31	1.81
Pittsburgh	2.31	2.31	1.81
Cleveland	2.44	2.44	1.94
Detroit	2.40	2.40	1.90
Indianapolis	2.44	2.44	1.94
Toledo	2.44	2.44	1.94
Milwaukee	2.43	2.43	1.93
Minneapolis	2.58	2.58	2.08
Duluth	2.51	2.51	1.96
Peoria	2.43	2.43	1.89
Cedar Rapids	2.54	2.54	2.00
Davenport	2.49	2.49	1.90
St. Louis	2.45	2.45	1.86
Denver	2.39	...	...
Dallas	2.15	2.15	...
Los Angeles	2.40	2.40	...
New Orleans	*2.56*	2.70	...
Kansas City	2.29	2.29	...
Cincinnati	**2.70**	2.52	...
St. Paul	2.63	...	...

ROSENDALE NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., including bags:

New York $1.15

30c. allowed for bags.

BRICK—The price per 1000 in cargo or carload lots is as follows:

	Common June 29, 1917	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	*$9.00* to *9.50*	$10.25	$8.00	**$25.00**	**$35.00**
Chicago	8.00	8.00	6.25	16.75	24.00
St. Louis, salmon	7.00	7.00	6.00	....	18.00
St. Louis, selected red	10.00	10.00	9.50	....	....
Dallas	8.10	8.10	....	22.00	22.50
New Orleans	9.00	9.00	....	....	....
Kansas City	**11.00**	10.00	....	....	20.00
Los Angeles	7.50	7.50	....	....	28.00
Boston	**13.25**	12.50	....	....	**25.00**
Denver	8.00	....	....	....	....
Cincinnati	**13.50**	9.50	....	....	*22.50*

MISCELLANEOUS

RAILWAY TIES—For fair-size orders, the following prices per tie hold:

	Material	6 In. x 8 in. by 8 Ft.	7 In. x 9 in. by 8 Ft. 6 In.
New York	Yellow Pine	$1.06 to 1.11	**$1.25**
St. Louis	White Oak	**1.00**	.75
Chicago	Green	**.85**	**.97**
San Francisco	Creosoted	**1.18**	**1.60**

CORRUGATED SHEETS—Price of corrugated sheets (2½-in. corrugations) in cents per pound:

Gage		Cincinnati	Birmingham	St. Louis	Denver
18–20	Black	$18.00*	....	$0.092	....
28	Black	5.75*	....	.094	$0.10
10	Galvanized	....	....	....	....
18–20	Galvanized	22.50*	$0.11	....	....
28	Galvanized	8.75*	.12	.113	.12

*Price per square of 100 sq.ft.

Proposals

For Proposals Advertised See Pages 64 to 71 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
July 10.	Duluth, Minn.	June 14
July 10.	New York, N. Y.	June 21
	Adv. June 14 and Adv. to 28.	
July 10.	Newark, N. J.	July 5
July 12.	Cuba City, Wis.	June 28
	Adv. June 14 to 28 and July 5.	
July 12.	Casper, Wyo.	July 5
July 17.	New York, N. Y.	June 14
	Adv. June 7 to 28 and July 5.	

SEWERS

July 9.	Brooklyn, N. Y.	June 28
July 9.	St. Paul, Minn.	July 5
July 9.	Neodesha, Kan.	July 5
July 10.	Beloit, Wis.	June 28
July 10.	Spirit Lake, Ia.	June 28
July 11.	Huntington, W. Va.	July 5
July 11.	Mexico, Mo.	July 5
July 12.	Bridgeport, Conn.	June 14
	Adv. June 14 to 28.	
July 12.	Neenah, Wis.	June 28
July 12.	Cleveland, O.	July 5
	Adv. June 28.	
July 23.	Wingdale, N. Y.	June 28
	Adv. June 28 and July 5.	
July 31.	Linndale, O.	July 5

STRUCTURAL STEEL WORK

July 9.	Salem, N. J.	June 28
July 9.	Olympia, Wash.	June 28
July 10.	La Grange, Tex.	June 28
July 10.	Vincennes, Ind.	June 28
July 13.	Lansing, Mich.	June 28
July 15.	Orange, Tex.	June 7
	Adv. June 7 to 21	
July 17.	West Palm Beach, Fla	June 21
	Adv. June 21.	
Aug. 2.	Miami, Fla.	June 28
	Adv. June 28 and July 5.	

REINFORCED CONCRETE

July 9.	Alexandria, Minn.	June 28
July 9.	Barberton, O.	June 28
July 9.	Camden, N. J.	June 28
	Adv. June 28 and July 5.	
July 9.	Cornwall, Sask	July 5
July 10.	Montezuma, Ga.	June 21
July 10.	Red Bluff, Cal.	July 5
July 11.	Wilmington, Del.	July 5
July 13.	Palo Alto, Cal.	July 5
July 13.	Regina, Sask.	July 5
July 13.	Elgin, Ill.	July 5
July 14.	Quincy, Ill.	July 5
July 15.	Kansas City, Kan.	June 28
July 16.	Berkeley Springs, W. Va.	June 28
July 17.	Geneva, Neb.	June 28
July 17.	New Brunswick, N. J.	June 28
	Adv. June 28 and July 5.	
July 30.	Watsontown, Pa.	July 5

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 7.	Selma, Ala.	June 28
July 9.	Winfield, W. Va.	June 21
	Adv. June 14.	
July 9.	Albany, N. Y.	June 21
	Adv. June 21 and 28 and July 5.	
July 9.	East View, O.	June 28
July 9.	Clarksburg, W. Va.	June 28
July 9.	Chaska, Minn.	July 5
July 9.	Amite, La.	July 5
July 9.	Casper, Wyo.	July 5
July 9.	Carlton, Minn.	July 5
July 9.	Indianapolis, Ind.	July 5
July 9.	Duluth, Minn.	July 5
July 9.	Kentwood, La.	July 5
July 9.	Yuba City, Cal.	July 5
July 9.	Madison, Wis.	July 5
July 9.	Newark, O.	July 5
July 9.	Louisville, Ky.	July 5
July 10.	Putnam, Va.	June 21
	Adv. June 28 and July 5.	
July 10.	Erwin, Tenn.	June 21
July 10.	Aberdeen, Miss.	June 21
July 10.	West New York, N. J.	June 28
July 10.	Rockville, Md.	June 28
	Adv. June 21 and 28 and July 5.	
July 10.	Uniontown, Pa.	July 5
July 10.	Jersey City, N. J.	July 5
July 10.	Massachusetts	July 5
July 10.	La Grange, Tex.	July 5
July 11.	Washington, Pa.	June 28
July 11.	Mt. Holly, N. J.	June 28
	Adv. June 28.	
July 11.	Huntington, W. Va.	July 5
July 12.	Olean, N. Y.	June 28
	Adv. June 28.	
July 12.	Newark, N. J.	June 28
July 12.	Cedar Grove, N. J.	July 5
July 12.	Elizabeth, N. J.	July 5
July 13.	Walla Walla, Wash.	July 5
July 13.	Cincinnati, O.	July 28
July 13.	Cincinnati, O.	July 5
July 14.	Indiana	June 14
July 14.	Pine Bluff, Ark.	June 28
July 14.	Lincoln, Neb.	July 5
July 14.	Rochester, Ind.	July 5
July 16.	California	June 28
July 18.	Belvidere, N. J.	June 28
	Adv. June 28 and July 5.	
July 16.	Everett, Wash.	July 5
July 16.	Port Orchard, Wash.	July 5
July 18.	Hawthorne, N. J.	July 5
July 19.	Flemington, N. J.	June 28
July 21.	Wauseon, O.	July 5
July 24.	Pennsylvania	June 28
July 25.	Idaho	July 5
Aug. 13.	Lewiston, Idaho	May 24

INDUSTRIAL WORKS

Aug. 1.	St. Petersburg, Fla.	July 5

EXCAVATION AND DREDGING

July 7.	Wadena, Minn.	July 5
July 10.	Fowler, Ind.	July 5
July 10.	Indianola, Ia.	July 5
July 10.	Spencer, Ia.	July 5
July 10.	Jefferson, Ia.	July 5
July 10.	Redwood Falls, Minn.	July 5
July 12.	Madison, S. D.	June 28
July 12.	Boone, Ia.	June 28
July 12.	Redwood Falls, Minn.	June 28
July 14.	Cambridge, Minn.	July 5
July 14.	Huntington, Tenn.	July 5
July 14.	Mankato, Minn.	July 5
July 16.	Hanna, Ill.	June 28
	Adv. June 28 and July 5.	
July 16.	Lake Shore (Spanish Fork Post Office)	July 5
July 18.	Glenwood, Ia.	June 21
	Adv. June 21 and 28 and July 5.	
July 19.	Greenville, Miss.	June 28
	Adv. June 21 and 28.	
July 20.	St. Cloud, Minn.	June 21
July 21.	Kankakee, Ill.	July 5
July 24.	Slayton, Minn.	July 5
July 27.	Detroit, Mich.	July 5

BUILDINGS

July 9.	Cleveland, O.	June 14
July 9.	Alliance, O.	July 5
July 9.	St. Peter, Minn.	July 5
July 10.	Almont, N. D.	June 28
July 10.	Rocky River, O.	June 28
July 10.	Huron, S. D.	June 21
July 10.	Bronson,, Ia.	July 5
July 10.	Yonkers, N. Y.	July 5
July 11.	Terre Haute, Ind.	July 5
July 12.	Philadelphia, Pa.	June 28
	Adv. June 21 and 28 and July 5.	
July 16.	Great Bend, Kan.	June 28
July 16.	Cresco, Ia.	July 5
July 18.	Concordia, Kan.	June 28
July 19.	Shenandoah, Ia.	June 28
July 20.	Akron, O.	July 5
July 21.	Martins Ferry, O.	July 5
July 21.	Livingston, Mont.	July 5
July 23.	Columbus Jct., Ia.	June 28
July 30.	Ft. Wayne, Ind.	June 28
July 31.	Ft. Wayne, Ind.	July 5

FEDERAL GOVERNMENT WORK

Bids Close		See En News-Rec
July 9.	Glenwood, Ia.	June
	Adv. June 21 and 28.	
July 9.	Annapolis, Md.	June
Aug. 9.	Du Bois, Pa.	June
	Adv. June 28 and July 5.	
July 9.	New London, Conn.	July
July 10.	Buffalo, N. Y.	June
	Adv. June 14 to 28.	
July 10.	Buffalo, N. Y.	June
	Adv. June 28 and July 5.	
July 10.	Washington, D. C.	June
	Adv. June 21 and 28 and July 5.	
July 11.	Vicksburg, Miss.	June 21
	Adv. June 21 and 28 and July	
July 12.	Hoopeston, Ill.	June
July 13.	Columbus, S. C.	July 5
July 16.	Newburyport, Mass.	June
July 16.	Charleston, W. Va.	June
July 16.	Dover, N. J.	July
July 16.	St. Louis, Mo.	July 5
July 18.	St. Ignatius, Mont.	June 21
	Adv. June 21.	
July 20.	Ft. Fairfield, Me.	June 21
July 23.	Cincinnati, O.	June 28
	Adv. June 21 and 28 and July 5.	
July 25.	Cherokee, Okla.	July 5
July 26.	Gallatin, Tenn.	June 28
	Adv. June 21 and 28.	
July 27.	Vernon, Tex.	June 28
July 31.	Chardon, Neb.	July 5
Aug. 3.	Winchester, Mass.	July 5
Aug. 6.	Globe, Ariz.	July 5

MISCELLANEOUS

July 9.	Marble Wainscoating—Media, Pa.	June 28
July 12.	Refrigerating Equipment—Thiells, N. Y.	June 21
	Adv. June 21 and 28.	
July 13.	Freight Conveyors—Albany, N. Y	June 21
	Adv. June 21 and 28 and July 5.	
July 13.	Fire Towers, Trenton, N. J.	July 5
	Adv. July 5.	
July 18.	Incinerator, Outremont, Que.	July 5

Where name of official is not given, inquiries should be addressed to City Clerk,, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., Westfield—Boro. plans rebuilding water system. About $80,000. C. C. Westfield, boro. and des. engr. Gannet, Seelye & Fleming, 204 Locust St., Harrisburg, cons. engrs. Noted Apr. 12.

N. J., Summit — City plans to install storm water system involving about 4 mi. 10- to 54-in. pipe. R. C. Wheeler, city engr.

Va., Petersburg—City will install filtration plant and pump made necessary by cantonment camp to be built here. About $25,000. R. D. Budd, city engr.

W. Va., Martinsburg—City extending water mains and installing electric pumps. J. H. Zicker, recdr.

O., Canton—City plans to issue $80,000 bonds to improve water system. L. B. Ohliger, supt.

O., Greenville—City plans new waterworks system. G. A. Johnson, 150 Nassau St., New York, cons. engr. Noted May 24.

Ill., Chicago—Plans being prepared by Engr. Dept. for new pumping station and 3 mi. water tunnel to connect with present Roseland tunnel at State St. in southwest section of city. About $3,000,000. J. Ericson, city engr.

Ia., Arlington—City voted $18,000 bonds to install water system. J. T. Wiltsie, supt.

Neb., Mitchell—City voted $11,000 bonds for water works improvements. Address City Clk.

Water-Works (Continued)

Neb., Scottsbluff—City will hold election to vote on **$22,000** bonds for water works extensions. **O. F. Finley, city engr. Noted Apr. 12.**

Tex., Port Arthur—City soon lets contract extending water and sewerage systems. About **$180,000. D. K. Miller, supt. and engr.**

Okla., Bartlesville—City will issue **$50,000** bonds for water works improvements. A. C. Easter, mayor.

Okla., Okmulgee—City plans election to vote on $53,000 bonds for water-works. Address City Clk.

Cal., McKittrick—Producers' Transportation Co., Union Bldg., Los Angeles, plans **to lay 30 mi. of 4- and 6-in. water mains.**

BIDS DESIRED

N. J., Newark—Until July 10, by Passaic Valley Sewerage Comrs. for foundations and connections for Wallington pumping station.

Kan., Chanute—(Official)—Until July 17, by G. G. Wood, city clk., for improving water-works. Black & Veatch, 507 Inter-State Bldg., Kansas City, Mo., cons. engrs.

Kan., Pittsburg—Until July 11, by L. Boyd, clk., for 1 6,000,000-gal. turbine-driven centrifugal pump and 1 4,000,000-gal. crank and flywheel pump.

Wyo., Casper—Until July 12, by C. M. Bryan, city clk., for 9900 ft. 12-in., 4800 ft. 8-in., 5400 ft. 6-in. and 900 ft. 4-in. water mains, also valves, hydrants, etc. L. S. Worthington, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Wis., Osceola**—City let contract water-works and sewerage systems to W. C. Frazer, 507 Germania Bldg., about $30,000; reservoir to Johnson & Drake, 705 Plymouth Bldg., Minneapolis, $4426.

Minn., Ely—See "Sewers."

★**Kan., Garden City**—(Official)—City let contract distribution system to Wheeler, Kelcher & Co., Garden City, transmission system to H. W. Otto, Garden City, pumps to American Mill Wks., 112 North Broadway, Aurora, Ill. Noted May 10.

Ark., Fayetteville—Water Comn. let contract filtration plant to Blodgett Constr. Co., Shreveport, La. About $34,000. Noted Apr. 10.

★**Ark., Stuttgart**—City let contract storm water brick conduit to carry off surface water to J. McCoppin, 2400 Arch St. About $29,700.

SEWERS

N. Y., Lancaster — City voted $35,000 bonds for sewer and water extensions. Address City Clk.

N. J., Summit—City plans to extend and enlarge storm water sewerage system, including repaving of temporary and semi-permanent pavements with permanent pavements, to cover a period of about 4 years. R. C. Wheeler, city engr.

Ky., Owensboro—City will issue $250,000 bonds for sewer construction. H. Talbother, city engr. Noted May 24.

O., Lorain—City plans sanitary sewer in portions of East 27th St. C. M. Osborne, city engr.

O., Sidney—City will issue $20,700 bonds for constructing sewers in various streets. A. F. Johnston, city engr.

Ind., Muncie—(Official)—City soon lets contract 6927 ft. 72-in. segment block sewer, 1754 ft. 48-in. brick sewer, 2412 ft. 36-in. cement pipe and 2378 ft. 15- and 20-in. tile. B. F. Deardorff, city engr.

Ind., South Bend—Bd. Pub. Wks. plans to install pipe sewers portion Chapin, Garst, Kendall, Leer and Dayton Sts., also Catalpa Ave. F. J. Anderson, city engr.

Mich., Lansing — City plans to install sewer in portion of Clayton St. H. W. Sparks, city engr.

Ill., Evanston—Bd. Local Improv. plans to spend $80,000 to install sewer from Williamette to Sanitary Dist. Canal. J. I. Bromer, pres.

Minn., Dodge Center—City will install sewerage system. J. F. Druar, 312 Commercial Bldg., St. Paul, preparing plans.

Kan., Wichita—City plans sewerage system in northern section. About $250,000. B. C. Wells, city engr.

Tex., Port Arthur—City soon lets contract for 56,000 ft. 8-in. vit. sewer pipe, 13,000 ft. of 10-in., 7000 ft. 12-in., 6000 ft. 15-in., 5000-ft. c.-i. force mains, 80 manholes, 125 clean-outs, 1 ejector station, 1 pump and collector well.

Okla., Sand Springs—See "Streets and Roads."

BIDS DESIRED

W. Va., Huntington—Until July 11 by City Comrs. for constructing 2 mi. 10- and 12-in. sewers. A. B. Mupin, city engr.

O., Cleveland—(Official)—Until July 12, by E. Shattuck, comr. purchases and supplies, building submerged outfall pipe, channel, etc., at sewage treatment works, etc.; advertised in this issue.

O., Linndale—(Official)—Until July 31, by A. L. Wurstner, clk., for sewers in Grand, Peeler and Snow Aves., and Park and Columbia Sts. J. B. Davis & Son, 876 The Arcade, Cleveland, village engrs. Noted June 28.

Minn., St. Paul—Until July 9, by H. W. Austin, purch. agt. for sewers in portion of Palace and Clarence Sts. and Berkeley Ave. O. Claussen, city engr.

Kan., Neodesha—Until July 9, by J. J. Carroll, city clk., for installing storm sewers.

Mo., Mexico—Until July 11, by city for installing sewage disposal plant. No bids received June 20. W. Dearing, city clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. J., Newark**—Passaic Valley Sewerage Comn. let contract generating sets at Newark Bay pumping station to J. W. Hooley, New York City, $22,579. Noted May 31.

N. J., Newark—Passaic Valley Sewerage Comn. received low bids, June 19, connections, etc., at Yantacaw pumping station, from J. F. Shanley Co., 26 Exchange Pl., Jersey City, $93,675; L. L. Brom Co., New York City, $93,914; O'Gara Constr. Co., 127 Frelinghuysen Ave., $96,720. Noted May 24.

N. J., Newark—Passaic Valley Sewerage Comrs. received lowest bid outfall pressure tunnel under Jersey City and New York Bay from C. A. Haskin, Boston. About $2,391,000. Noted May 10.

★**N. J., Newark**—Passaic Valley Sewerage Comrs. let contract Kearney-Harrison branch intercepting sewer to Harrison & Craig, 1837 Broad St. About $104,662. Noted June 28.

Tenn., Cleveland — See "Streets and Roads."

★**O., Cincinnati**—(Official)—City let contract installing sewers from Baltimore and Carl St. to Yoast St. to M. J. Connelly & Co., 636 West 8th St., $25,894.

★**Ill., Cambridge**—Town let contact sewage disposal plant to P. Schlachter, 609 East Hickory St., Streator, $10,000.

★**Ill., Lombard** — (Official) — Bd. Local Improv. let contract installing sewers and sewage treatment plant to Gedney & Murphy, 612 Globe Bldg., Minneapolis, $172,397. Noted June 7.

Mich., Ann Arbor—(Official)—City received low bid storm and sanitary sewers from W. Eddy & Son. M. Osgood, city engr.

★**Ill., Rock Island** — See "Streets and Roads."

★**Wis., Hillsboro** — Village let contract furnishing and laying vitr. pipe sewers to Brogan & Burns, Green Bay, $12,490. Noted June 14.

★**Wis., Osceola**—See "Waterworks."

★**Ia., Cedar Rapids**—Mound Farm Real Estate Co. le. contract 6- and 10-in. sewers to J. B. Ford & Son.

★**Ia., Creston**—City let contract sewage-disposal plant to Morrison Constr. Co., 318 Hubbell St., Des Moines; outfall sewer extension to Akin & Flutter, Corning, $1.10 per ft. Noted June 14.

★**Ia., Early**—City let contract installing sewers to C. A. Dobson Co., Lincoln, Neb. About $25,311.

★**Ia., Marshalltown** — City let contract for storm sewer to A. Carlson, Marshalltown. About $29,000. Noted Apr. 5.

Minn., Ely—City received low bid installing storm and sanitary sewers and water mains from Pastoret Constr. Co., 511 Lyceum Bldg., Duluth, about $30,000.

★**Neb., Omaha**—City let contract storm sewer in portions of 37th St. to Nebraska Constr. Co., $57,000.

★**S. D., Sioux Falls**—City let contract West Morningside sewer to Cady & Savonell. $30,000.

★**Ark., Stuttgart**—City let contract brick storm water sewer to J. McCoppin, 2400 Arch St., Little Rock, $29,700. Noted June 28.

★**Ariz., Yuma**—City let contract sewers Dist. No. 2 to C. H. Julian, San Diego, Cal. About $37,058.

STRUCTURAL STEEL WORK

Proposed Work

Pa., Pittsburgh—Supervs. Allegheny and Beaver Cos. rejected bids opened June 22, extending inter-county bridge No. 1 over Sewickley Creek, Fair Oaks Sta. Noted June 14.

Va., Metomkin — Washington-Newport News Short Line will build bridge over Potomac River from Metomkin to Riverside, Md.; double leaf bascule drawbridge, draw 300 ft. wide, truss and girder approaches. F. S. Gannon, 55 Liberty St., New York City, pres.

Ind., Brazil—County appropriated $35,000 for new bridge over Eel River to replace one destroyed by flood. A. Graeser, co. aud.

Wis., Madison—See "Streets and Roads."

Ia., Grundy Center—Bd. Superv. will spend about $20,000 for bridge work during year. Address co. engr.

Tex., Dallas — (South Dallas) — City Comrs. appropriated $29,000 to complete approach to Forest Ave. bridge. County will appropriate $8000 toward work. Address O. H. Land, comr.

Okla., Coalgate — See "Streets and Roads."

Wash., South Bend—See "Streets and Roads."

BIDS DESIRED

La., Amite—See "Streets and Roads."

Ind., Vincennes—Until July 10 by Co. Comrs. rebuilding and repairing following bridges, Martha Utt, William Kyle, G. W. Hill, Roll Horn, William Menk, William Theriac, Taylor Moran, Toney Frey, Nugent, Enmeier and Gayhart box culvert. J. I. Muentzer, aud.

O., Miamisburg—(Official)—Until July 16 by W. H. Aszling, co. clk., Dayton, for steel superstructure for bridge No. 248 over Great Miami River.

Cal., Red Bluff—See "Reinforced Concrete."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Miss., Yazoo City**—Bd. Superv. Let contract steel and concrete bridges in Beat No. 3 to Scruggs Co. of Alabama, about $20,000. Noted Apr. 26.

Minn., Detroit—See "Excavation and Dredging."

★**Minn., New Ulm**—Superv. Brown and Renville Cos. let contract bridge over Minnesota River to connect state roads between 2 counties to Waddell & Hohley, Minneapolis. Noted May 24.

Mont., Rexford — County let contract bridge to Coast Bridge Co., Ry. Ex. Bldg., Portland. About $30,000.

★**Wash., Olympia**—State Highway Comn. let contract building Coweman River bridge to Monson Constr. Co., Portland, $18,427. Noted June 7.

★**Cal., Nicolaus** — County let contract superstructure bridge over Feather River to Clinton Constr. Co., 21st and Treat Sts., San Francisco, $54,250. Noted June 21.

REINFORCED CONCRETE

Proposed Work

Mass., Boston—St. Marys Trust plans 2-story, 70 x 180-ft. rein.-con. garage, Commonwealth Ave. and St. Marys St. About $180,000. H. G. King, 185 Devonshire St., sec.

N. J., Newark—Citizens' Advisory Com. plans 2- and 3-story rein.-con. boys' vocational school, Sussex Ave., between 1st and 2nd Sts. Bd. Educ. appropriated $206,700 for work. L. Sonntag, City Hall, act. superv. archt.

Pa., Montgomery — County will build rein.-con. bridge over west branch of Susquehanna River at foot 2nd St. M. C. Krause, co. cons. engr.

Pa., Phila.—Dept. Wharves, Docks and Ferries will soon let contract for rein.-con. pier at foot Kenilworth St.; about 550 ft. long and 120-ft. wide. G. S. Webster, 550 Bourse Bldg., Dir. Noted Mar. 1.

Fla., Bradentown—County will hold election Aug. 1 to vote on $60,000 bonds for rein.-con. bridge over Manatee River between Bradentown and Palmetto.

Ill., Rock Island—Illinois Oil Co., 1517 3rd Ave., plans 3-story, rein.-con. warehouse, 24th St. and 4th Ave. About $50,000.

Wis., Kenosha—Winther Motor Co. plans 1-story, 100 x 500-ft. rein.-con. and steel plant. About $100,000. M. P. Winther, pres.

Wis., Milwaukee — Store and Office — Globe Investment Co. plans rein.-con. and steel, Grand Ave., between West Water and 2nd Sts. About $100,000. Kirchoff & Rose, Majestic Bldg., archts.

Kan., Parsons—County will build bridge over Labette Creek on Main St., 2 con. arches about 75 ft. long with roadway from 20 to 24 ft. wide. About $12,000. W. J. King, co. engr.

Tex., Huntsville — See "Streets and Roads."

Cal., San Francisco—Fleishacker Paper Box Co., plans 4-story, 123 x 130-ft. rein.-con. factory, 2nd and Harrison Sts. About $125,000.

BIDS DESIRED

Pa., Watsontown—(Official)—Until July 30, by J. C. Tressler, co. clk., Sunbury, for rein.-con. bridge over west branch Susquehanna River between Watsontown and White Deer. M. J. Flynn, co. engr.

N. C., Wilmington—Until July 11 by Cape Fear Packing Co., for 4-story, 60 x 180-ft. rein.-con. packing plant. G. H. Smith, pres. Wilson & Sompayrac, Columbia, S. C., archts. Noted May 31.

Ill., Elgin—(Official)—Until July 13, by M. H. Brightman, city engr., concrete slab bridge over Fox River on Kimball St. G. A. P. Turner, Walker Burton Bldg., Minneapolis, cons. engr. Noted June 14 under "Structural Steel."

Ill., Quincy — (Official) — Until July 14, by L. L. Boyer, co. supt. highways, for 14 rein.-con. bridges. About $12,500. Noted June 21 under "Structural Steel."

Ia., Spencer — See "Excavation and Dredging."

Cal., Red Bluff—Until July 10th by H. G. Kuhn, co. clk., building rein.-con. subway under Southern Pacific tracks on State Highway, also bridge over Red Bank Creek.

Ont., Cornwall—Until July 9th by A. I. MacDonald, co. clk., building 14 rein.-con. bridges on Highway system of United counties of Stormont, Dundas and Glengary, E. Merkley, chn. rd. com.

Sask., Regina—Until July 13th by H. S. Carpenter, deputy minister of highways, building 2 rein.-con. arch bridges over Arm and Qu' Appelle Rivers.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Camden—Victor Talking Machine Co., Front and Cooper Sts., let contract 1-story rein.-con. addition to Irwin & Leighton, 126 North 12th St., Philadelphia, $75,000.

★Pa., Johnstown—T. J. Harris, supt. sts. and pub. wks., let contract rein.-con. bridge over Little Conemaugh River on Walnut St. to Hackedorn Contr. Co., 1134 Indianapolis Pythian Bldg., $49,767. Noted June 28.

★Pa., Phila.—Pennsylvania R.R. let contract 1-story, rein.-con. addition to Girard Point Works, concrete work and piling Pier No. 1, Girard Point to Brann & Stuart, Commercial Trust Bldg., $50,000 and $30,000 respectively.

★Miss., Yazoo City — See "Structural Steel."

★O., New Phila.—Co. Comrs. let contract rein.-con. beam bridge over Beaverdam Creek, Beaver Ave., to F. McClain, $5000; rein.-con. arch bridge over Little Stillwater Creek, East Center St. to A. Wardell, $18,600. Noted May 24.

★Mich., Detroit—Detroit Pressed Steel Co. let contract 4-story rein.-con. factory, 1800 Mt. Elliott Ave. to A. A. Albrecht Co., 1130 Penobscot Blvd.

★Mich., Monroe — (Official) — Co. Rd. Comrs. let contract concrete girder bridge over Swan Creek, Berling Twp., to Nolan & Gans, Edenville, about $10,000. Noted June 7.

★S. D., Sioux Falls—(Official)—County let contract rein.-con. outlet spillway for D. D. No. 1 and 2 to Sioux Falls Constr. Co., Sioux Falls. About $65,000.

★Wash., Spokane—Great Northern Ry. let contract concrete piers for several bridges to W. T. Butler Contr. Co., Central Bldg., Seattle. About $50,000.

★Cal., Los Angeles—L. Phillips let contract 3-story, 92 x 128-ft., rein.-con. store building to Kubach Co., Merchants Natl. Bank Bldg. About $107,500.

STREETS AND ROADS

Proposed Work

N. J., Ocean City—Bd. Freeholders plan new road from North Wildwood to Shore Rd. About $50,000. L. M. Rice, Wildwood, co. engr.

N. J., Rahway—City plans to pave Maple Terrace, asphalt. H. Lambert, clk.

Pa., Phila.—Council passed ordinance to pave portion Rising Sun, Etting, 7th, Lebanon, 59th, 57th, Jefferson, 64th and Warring Sts., grading and opening Grape, Rex, Litchfield, Frankford, Mifflin and Beaumont Sts. C. A. Albright, city engr.

Md., Takoma Park—Wash., D. C. Post Office—Council plans to pave Carroll Ave. About $30,000. S. W. Williams, mayor.

Va., Hillsville—County election Aug. 23 to vote on $300,000 bonds to build roads.

Ga., West Point—City plans to streets, business section, brick, concrete and asphalt block. About $60,000.

Fla., Rockledge — City voted $20,000 bonds to improve streets.

Ala., Russellville—City plans to improve streets. About $10,000.

Miss., Ellisville—County to sell $200,000 bonds to build roads.

Miss., Marshfield—Bd. Supervs. plan to issue $50,000 bonds to build sand clay roads, Dist. No. 1 and $4000 for sand clay roads, Dist. No. 2.

Miss., Pontotoc—Bd. of Co. Supervs. plan to issue bonds to build and improve highways, 5th Dist.

La., Lake Charles—City plans to pave portion Ford St.

O., Ashland—Council passed ordinance to pave, grade and curb Cleveland Ave. R. H. Conn, city engr.

O., Canton—State Highway Dept. received no bids paving 1.17 mi. Canton-New Franklin Rd. About $38,000. New bids.

O., Cincinnati—Council passed resolution to improve and pave Dryden, Mapleleaf and Arch Sts. F. Krug, city engr.

O., Cincinnati—Council passed ordinance to issue $20,400 bonds to improve and pave Rice, Cora, Collegevue, Larkspur and Hakill Sts. F. Krug, city engr.

O., Cincinnati—Co. Comrs. soon lets contract improving Hamilton Pike from North Bend Rd. to north corporation line of Mt. Healthy. About $175,000.

O., Cincinnati—County plans to pave portion Bogart Rd., concrete, cost, $30,300; Canal Rd., concrete, $50,500, macadam, $20,400.

O., Cincinnati—City plans to pave portion Arrow Ave., con. F. Krug, city engr.

O., Cleveland—Council approved plans paving Broadway Hill, dressed block stone, cost, $32,090; portion 105th St., $12,500; West 44th St., $7100; East 73rd St., $10,593. R. Hoffman, city engr. Noted June 28.

O., Cleveland—City and county plan to repave and widen portion Cedar Ave. and Broadway. About $206,000. County to appropriate $68,667 toward cost.

O., Cleveland—City plans to improve and pave portion East 103rd, Clayborne, East 104th, East 116th Sts. R. Hoffman, city engr.

O., Columbus—County to sell $15,000 bonds to improve Inter County Highway No. 49. J. Scott, clk.

O., Dayton—Co. making surveys for paving Dayton and Covington Pikes, from Montgomery county line to West Milton corporation line. A. Knoop, co. engr.

O., Defiance—Council having plans prepared estimating cost improving portion Summit, Hopkins and 5th Sts.

O., East Liverpool—City plans to pave, grade and curb, etc., portion Bradshaw Ave., hard burned vitr. brick. J. C. Kelly, city engr.

O., East Liverpool—County voted $38,000 bond issue to improve 6 mi. interstate highway from Beaver to Ohio state line.

O., Ironton—City council received plans and estimates for paving various streets. About $95,000. L. G. Howell, city engr.

O., Lorain—Council plans to pave various streets. About $87,600. C. M. Osborne, city engr.

O., Marion—City plans to issue $60,000 to build sidewalks and pave streets. H. H. Noyes, city engr.

O., Newark—Council passed ordinance to pave portion Evans St. C. B. Keller, pres.

O., Portsmouth — Council passed ordinance to improve portion 21st St. P. G. Harper, city engr.

O., Youngstown—City preparing plans for estimating cost, widening East Rayen Ave. F. M. Lillie, city engr.

O., Youngstown—Council passed ordinance to pave portion Queen St., Florida and Overland Aves. F. M. Lillie, city engr.

Ind., Greenfield—Co. comrs. plan to pave 3 mi. National Rd., brick. C. Boone, co. engr.

Ind., Indianapolis—County Comrs. issued $200,000 bonds to improve roads leading into post and to build new road to Ft. Benjamin Harrison.

Ind., Indianapolis—County sold $28,679 bonds to build 3 gravel roads.

Ind., Lafayette—City plans to sell $20,000 bonds to pave streets. Plans include improving portion Sheetz St. H. B. Overesch, city engr.

Ind., Logansport—Bd. Pub. Wks. plans to macadamize Seybold and Helm Sts. H. H. Thompson, city engr.

Mich., Bay City—Bd. Pub. Wks. soon lets contract paving Lincoln Ave. and Saginaw St. H. C. Thompson, city engr.

Illinois — State Legislature, Springfield, appropriated $3,800,000 to build roads during next 2 years.

Ill., Belleville—Bd. Supervs. voted $400,000 bonds to build hard surfaced roads.

Ill., Chicago—City plans to pave portion South Chicago Ave., creosoted block. About $143,000. J. Ericson, city engr.

Ill., Chicago — County Court approved plans to widen 1 mi. East 71st St., 66 to 110 ft. wide. About $80,000. J. Ericson, city engr.

Ill., Lebanon—Bd. Supervs. voted to issue $400,000 bonds to build roads. D. O. Thomas, co. supt.

Ill., Moline—City rejected bids repaving 5th Ave. Noted June 28.

Ill., Springfield—City plans to pave 66 blocks. W. D. Seeley, city engr.

Wis., Ashland—City plans to grade, repair and macadamize several streets. About $10,000. J. Phillips, city engr.

Wis., Beloit—City plans to pave portion Park Ave. G. E. Heebink, city engr.

Wis., Madison—A. R. Hirst, State Highway Comr. plans to build 300-mi. road and 350 bridges. About $4,200,000.

Ia., Clinton—J. G. Thorne, city engr., preparing plans paving portion Main St.

Ia., Clinton—City plans to pave 2nd Ave. involving 7300 sq.yd. bricking paving, 100 cu.yd. rock excavation, 6500 cu.yd. earth excavation, etc. About $20,000. J. G. Thorne, city engr.

Ia., Des Moines—Co. supervs. plan to build 5 mi. highway from Des Moines to Camp Dodge. About $132,000.

Ia., Mason City—Council plans to pave portion Division St. F. P. Wilson, city engr.

Ia., Marshalltown—City soon lets contract paving 27,000 sq.yd. Broad St. W. H. Steiner, city engr.

Ia., Sioux City—County plans to build 2 or 3 roads. About $70,000. Federal Government to appropriate toward cost.

Ia., Sioux City—Council plans to pave 25th and Aubin Sts. T. J. Johnson, city engr.

Minn., Barnesville—City plans to pave 7th Ave. S. E. Aamodt, clk.

Kan., Kansas City—City passed resolution to pave and curb Ann Ave., 26 ft. wide. W. M. Barclay, city engr.

Streets and Roads (Continued)

Neb., Kearney—Council passed ordinance to pave portion 23rd and 24th Sts., and 1st, 2nd and 5th Aves. E. H. Morey, city engr.

N. D., Bowman—Co. Comrs. voted to spend $10,000 on Yellowstone Highway and trunk line roads. F. Huff, aud. P. W. Thomas, engr.

Mont., Butte—City plans to pave portion Broadway; cost, $20,694, Granite St., $11,592. J. J. Armstrong, city engr.

Mo., Benton — County voted $800,000 bonds to build roads. Noted Apr. 19.

Mo., Charleston—City having plans prepared paving 48 blocks, asphaltic concrete, 32-, 36- and 44-ft. wide. Berthe Eng. Co., city engrs.

Mo., Joplin—Carthage, Webb City, Joplin, Mo., Galena, Baxter Springs, Kansas, Commerce, Miami and Oklahoma plan to build 60 mi. concrete highway from Carthage, Mo. to Miami, Okla. Address J. M. Malany, supt. Joplin Spl. Rd. Dist.

Mo., Kingston—County preparing plans building 132-mi. hard roads, 16 ft. wide, brick and concrete or concrete.

Mo., Nevada—City plans to pave portion Commercial and Austin Sts. S. L. Higgins, clk.

Mo., New Madrid—County plans election to vote on $28,000 bonds to build roads.

Mo., St. Joseph—Council passed ordinance to pave portion Missouri and Mitchell Aves. and Lowell St., also establishing grades portion Lowell St. C. P. Hoff, city engr.

Mo., St. Joseph—Bd. Pub. Wks. plans to pave portion 2nd St., also Duncan St., asphaltic concrete, Renick St., refined tar binder and oiling portion 2nd and Robidoux Sts. C. R. Hoff, city engr.

Mo., Sikeston—County election July 15 to vote on $800,000 bonds to build roads. Noted June 21.

Ark., Arkadelphia—C. C. Burkett and W. A. Garner, state highway engrs., making surveys building Arkadelphia-Hot Springs turnpike.

Ark., Little Rock—H. R. Carter, state highway engr. made surveys building 130-mi. Little Rock-Batesman Rd. from Little Rock through Argenta, Jacksonville, Cabot, Austin, Beebe, Searcy, Judsonia, Bald Knob, Newport and Batesville.

Tex., Houston—County voted $1,100,000 bonds to build and improve roads. C. H. Bryan, co. judge. Noted June 7.

Tex., Huntsville—County voted $12,000 and $25,000 bonds to build roads, Goshen Rd. and Bodias Dists. W. J. Kelly, co. engr.

Tex., Huntsville—County preparing plans building 50-mi. road, 40 ft. wide, sand, clay, gravel, macadam and concrete, also building wooden bridges, concrete culverts. W. J. Kelly, engr. Noted May 31.

Okla., Cement—Cement Twp. votes July 14 on $25,000 bonds to build roads.

Okla., Clinton—Bd. Comrs. plan to pave 2 additional paving dists., with sheet asphalt. About $100,000. Benham Eng. Co., Colcord Bldg., Oklahoma, engrs.

Okla., Coalgate—Co. comrs. rejected bids grading and surfacing 20-mi. road and bridges, Phillips Twp. New bids. Hess & Skinner & Peckham & Wilkins, Dallas, engrs. Noted May 24.

Okla., Kingfisher — City plans to pave Main and other streets.

Okla., Marlow—City soon receives bids paving streets, business section. About $60,000. Benham Eng. Co., Colcord Bldg., Oklahoma, engrs.

Okla., Nowata — County voted $800,000 bonds to build roads.

Okla., Sand Springs—Council plans to pave streets, Dist. No. 2, asphaltic concrete; also install Sanitary Sewer Dist. No. 5. About $90,000. Benham Eng. Co., Colcord Bldg., Oklahoma, engrs.

Colo., Denver—State Highway Comn. soon lets contract grading and paving 4-mi. between Denver and Littleton. J. E. Maloney, engr.

Wash., Colfax—Co. Comrs. passed resolution to create Improv. Dist. to build 23 mi. hard-surface roads between Steptoe and Ewan. About $160,000. J. M. McCaw, co. engr.

Wash., Seattle—Bd. Pub. Wks. approved plans grading 30th Ave. South, et al. About $20,000. C. B. Bagley, secy.

Wash., Seattle—A. H. Dimock, city engr., submitted report to Bd. Pub. Wks., estimating cost paving portion Michigan St., at $14,337; Valley St., $9385.

Wash., South Bend—County voted $250,000 bonds to build 45-mi. hard surfaced highways and 3 bridges. C. S. Henry, engr.

Wash., Spokane—Co. Comrs. soon receive bids paving 4 mi. permanent road, east from Fairfield to Palouse Highway. About $40,000.

Wash., Vancouver—State Highway Comn. approved plans Co. Comrs. for paving 4th Plain Rd. About $28,000.

Ore., Pendleton—City soon receives bids paving portion Webb St., gravel bitulithic. About $16,671.

Ore., Roseburg—County to sell $550,000 bonds July 28 to improve roads.

Cal., Modesto—City election July 30 to vote on $40,000 bonds to pave streets. Noted May 24.

Cal., Redding—County plans election to vote on $60,000 bonds to build roads, Inwood Rd. Div.

Que., Hull—City plans to pave streets and build concrete sidewalks. About $32,500. J. P. Laforest, city engr.

Que., Quebec—Provincial Highway Dept. plans to macadamize 20-mi. road from Chicoutimi to Jonquieres and Bagotville. J. A. Tessier, minister of roads.

Ont., Galt—Council plans to pave 1½ mi. streets.

Man., St. Boniface—Dept. Pub. Wks. soon lets contract paving Marion and Hill St., also building concrete sidewalks Berry St. J. B. Cote, clk.

BIDS DESIRED

Massachusetts—(Official)—Until July 10 by State Highway Comn., Boston, building section highway, Uxbridge Twp. R. H. Newell, selectman, Uxbridge Twp.

N. J., Cedar Grove—Until July 12 by Bd. Freeholders, Newark, paving Little Falls Rd. About $57,600. F. A. Reimer, Newark, co. engr. Noted June 28.

N. J., Elizabeth—Until July 12 by Bd. Pub. Wks. paving 1694 sq.yd. Mellon Pl., shale brick, 6-in. concrete foundation, blue stone curb. T. E. Collins, city engr.

N. J., Jersey City—(Official)—Until July 10 by Bd. Comrs. improving portion St. Paul's Ave. C. S. Van Kewien, city engr.

N. J., Hawthorne—(Official)—Until July 18 by Bd. Freeholders, Paterson, for improving Goffle Rd. J. MacDonald, dir.

W. Va., Huntington—Until July 11 by city comrs. paving portion 6th St. A. B. Maupin, city engr.

La., Amita—(Official)—Until July 9 by Bd. Supervs. Rd. Dist. No. 4, grading, graveling, bridging 3.3 mi. Kentwood east and west Rd., grading and bridging 4.36 mi. Tangipahoa east and west Rd., also graveling 3.86 mi. same. G. A. Kennon, Kentwood, secy. J. M. Fourmy, Hammond, engr.

Ky., Louisville—Until July 9 by Bd. Pub. Wks. building portion Stephenson Ave., vitr. brick. D. R. Lyman, city engr.

O., Cincinnati—(Official)—Until July 13 by C. F. Hornberger, dir. pub. ser., for grading, setting granite curbs, paving roadway with brick and installing necessary drains, etc., portion Scioto St. Noted May 31.

O., Newark—(Official)—Until July 9 by Co. Comrs. building 1.91 mi. Rd. No. 3, Hartford Twp., water-bound macadam. J. W. Hursey, aud.

O., Waueson—Until July 21 by J. C. King, village clk., paving Beach St.

Ind., Indianapolis—Until July 9 by Bd. Pub. Wks. paving portion Winthrop St. J. T. Jeup, city engr.

Ind., Rochester—Until July 14 by Co. Comrs. building gravel road on line Fulton and Marshall counties. E. A. Smith, aud.

Wis., Madison—Until July 9 by city paving portion King St. asphaltic concrete. H. V. Tanant, city engr.

Minn., Carlton—Until July 9 by A. R. Norman, co. aud., building 2½ mi. state roads.

Minn., Chaska—Until July 9 by Co. Comrs. building 2½-mi. state roads. J. B. Connolly, aud.

Minn., Duluth—Until July 9 by O. Halden, co. aud., clearing and improving 1½ mi. Burnett Rd., 1½ mi. La Vague Rd., 2½ mi. Britt Rd., 3 mi. Britt-Pike River Rd.

Neb., Lincoln—Until July 14 by County paving and grading Dist. No. 16, asphaltic concrete, vertical fibre brick and concrete About $15,000. A. E. Sutherland, clk.

Wyo., Casper—(Official)—Until July 9 by C. M. Bryan, city clk., paving and grading portion Wolcott, 1st, 3rd, and 4th Sts., bitulithic. Noted June 14.

Tex., La Grange—Until July 10 by R. Klatt, co. clk., building east approach to Colorado River bridge, 500 ft. length, 15-ft. roadway.

Idaho—Until July 25 by State Highway Comn., Boise, building 45-mi. highway from Washington county line to New Meadows. About $120,000.

Wash., Everett — Until July 16 by co. comrs., hardsurfacing Bond Issue Proposition No. 26 and 29; building Permanent Highway, No. 11-B, Auburn-Enumclaw Rd., concrete, cost, $100,000; building Juanita Kirkland Rd., Permanent Highway No. 2-F, concrete, $100,000. S. J. Humes, co. engr.

Wash., Port Orchard—Until July 16 by co. comrs. building and improving Permanent Highway No. 1-C. F. D. Gore, co. engr.

Wash., Walla Walla—Until July 13 by co. comrs. building Permanent Highway No. 16. G. Cookerly, co. engr.

Cal., Yuba City—Until July 9 by City paving portion 2nd and Bridge Sts.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Massachusetts — State Highway Comn., Boston, received low bids building section highway, Washington and Hindsdale Twps. from L. Suzio Constr. Co., State and Brooks Aves., Meriden, $109,889; Crowe & Walsh, Pittsfield, $116,202; Perini Constr. Co., Ashland, $130,361.

★Mass., Boston—City let contract road oil to A. Speare's Sons Co., 156 6th St., Cambridge, $23,850.

★Mass., Brookline — Town let contract paving 4600 sq.yd. grooved wood block pavement Harvard St. to Simpson Bros., 166 Devonshire St., Boston, $24,512.

★N. Y., Binghamton—City let contract paving Tompkins St., bitulithic, to Warren Bros., 142 Berkley St., Boston, $2.44 sq.yd.

★N. Y., Little Valley—Town let contract paving Main St., brick to J. Morrisey, Dunkirk, $13,532.

★N. Y., Long Island City—M. E. Connolly, boro. pres. let contract improving portion Van Alst Ave. to Hastings Pavement Co., 25 Broad St. About $10,000. Noted June 21.

★N. J., Hackensack — (Official) — Bd. Freeholders let contract paving 2nd Sect. Ft. Lee Turnpike to Ufheil Constr. Co., Peetzburg, $21,423. Noted June 21.

Pennsylvania—G. H. Biles, 2d Deputy State Highway Comrs., received low bids building 4836 ft. concrete road, Center Twp., from J. W. Hallam, Washington, $28,732; Reed, Yoders & Moore, Waynesburg, $32,301; R. Swan, Jr., Co., Jenkins Arcade, Pittsburgh, $48,816.

★Pa., Eddystone—Council let contract paving Essington Ave. to Union Paving Co., 30th and Locust Sts., Philadelphia. $52,000.

Pa., Phila.—City received low bids paving portion Delaware Ave. also all street intersections between Reed and Snyder Ave. from McNichol Paving Co., 1723 Cherry St., $149,176 and $44,005 respectively.

★W. Va., Huntington—County let contract paving Kanawha and James River Rd. to Harrison & Dean, $100,000.

★Ga., Atlanta—City let contract paving Lakewood Park Driveways to Hudson Constr. Co., Charleston, W. Va., $1.97 per sq.yd.; Gordon Rd. and Ashby St. to Pittman Constr. Co., $1.57½ per sq.yd. Noted May 31.

★Ga., Griffin — Mayor and Council let contract grading, curbing, draining and paving various streets, vitr. brick to Augusta Vitrified Shale Brick Co., $135,820. Noted June 14.

★Miss., Greenville—Co. Comn. let contract building Greenville-Leland Rd. to Healy Constr. Co., Meridian, $94,000.

★Miss., Hattiesburg—County let contract building 60-mi. Jefferson Davis and Natchez Mobile Highway to Central Alabama Constr. Co., Montgomery, Ala., $91,507.

★Miss., Vicksburg—City let contract paving Clay and East Aves., to Southern Paving Constr. Co., James Bldg., Chattanooga.

Tenn., Cleveland—City received low bids paving 51,000 sq.yds. and installing storm sewers various streets from Merrill Road Improv. Co., James Bldg., Chattanooga, $120,189. Noted May 31.

★Tenn., Knoxville—(Official)—Bd. Pub. Pub. Wks. let contract resurfacing 35,000 sq.yd. to Murry Constr. Co., Holston Natl. Bank Bldg., $1.13 sq.yd. Noted June 21.

★Tenn., Lawrenceville—County let contract building Pulaski, Waynesboro, Ethridge, Cross Rds. and Henryville Rd. to B. Williams, McMinnville, $99,037.

★Ky., Louisville—City let contract rebuilding Main St., concrete, to H. J. Meyers, Covington, $13,000.

★O., Canton—County let contract paving Canton-Middle Branch Rd. to Wise Bros., Canton, $38,400.

Streets and Roads (Continued)

★O., Canton—County let contract paving Meyer's Lake Rd. to H. Corl, Canton, $26,396; Canton-Middlebranch Rd. to Wise Bros., Canton, $38,452.

★O., Cleveland—(Official)—City let contract paving Bulkley Rd. to Cleveland Trinidad Paving Co., 420 Lakeside Ave., $19,-118. Noted June 14.

★O., East Youngstown—Village let contract improving Warhurst Rd. to W. H. Keesecker, East Youngstown.

★O., Napoleon—Co. comrs. let contract building Pope Rd. to J. Westrick, $53,000.

★O., Newark — Co. Comrs. let contract improving 1 mi. streets to Federal Paving Co., Hamilton, $52,000.

O., Sprinfield—City received low bids paving West High St. from M. J. Hannah and F. J. McHugh, East High St., each bidding $35,496.

★O., Toledo—County let contract building Berkey Rd. to Warner & Mackechnie, $35,063.

★O., Toledo—City let contract paving Academy Ave. and Swan Lane to Peters Bros.; alley between Erie and Ontario St. to McKinney Bros.

★O., Warren—County let contract building Youngstown-Conneaut Rd., Brookfield Twp., to Evans Bros. Constr. Co., Hubbard, $34,642.

★O., Waverly—County let contract building 1 mi. brick road on Columbus and Portsmouth Highway to Bolin & Wilt, Washington, C. H., $30,535.

★O., Youngstown—Bd. Control let contract paving Lucius Ave., asphaltic concrete to Kelley & Meyer, $2.00 per yd., Glenwood Ave., concrete to Lee Tiberic, installing sewers in several streets to Miller & Tobin.

★Ind., Anderson—Co. comrs. let contract building William P. Cox Rd. to W. J. Neidhardt & Co., $38,450; Harlas Thomas and Charles Wright Rds. to J. D. Reason & Co., $37,853 and $28,975 respectively.

★Ind., Galesburg—Co. Comrs. let contract building Main St. Rd., medora vitri. brick, to S. R. Adams & Co., Princeton, $48,400.

★Ind., Goshen—County let contract building 6500 ft. brick road to E. Crip, Goshen, $22,750.

★Ind., Indianapolis—Bd. Comrs. let contract building brick road from Millersville to Ft. Harrison to Northern Constr. Co., Elkhart, $137,500.

★Ind., Newcastle—City let contract paving various streets to J. Garvey, Newcastle, $24,120.

Ind., South Bend—Bd. Pub. Wks. received low bids paving Milton St. from Williston Constr. Co., Western Constr. Co., Phoenix Bldg., Iowa City; W. B. Brady Constr. Co., 623 J. M. S. Bldgs.

Ill., Joliet—City received low bid paving 3rd Ave. and Wilson St. from R. H. Conway Co.

★Ill., Monmouth—County let contract building 5,500 ft. state-aid concrete highway to E. A. Lord Constr. Co., $14,837.

★Ill., Polo—City let contract paving 9 blocks, brick to Gund-Graham Co., Freeport, $43,141.

★Ill., Rockford—County let contract building 1-mi. brick road from Kishwaukee St. Rd. to military camp to A. E. Rutledge.

★Ill., Rock Island—City let contract paving portion 41st St. to McCarthy Improv. Co., 3rd and Perry Sts., Davenport, Ia., hillside brick, $2.08 yd., $2.12 brick with pitch filler, 40c. excavation, 60c. storm drains, 45c. curbing, $40, catch basins, $50, manholes.

★Ill., Sterling—County let contract state-aid monolithic highway to F. Giffrow, $16,243.

★Wis., Kenosha — County let contract grading, draining, culverts, and surfacing roads with concrete to G. R. Wade, Kenosha, $18,000; C. Peterson, Kenosha, $64,000; J. Darrow, Waukegan, $40,000; E. H. Merrick, Burlington, $21,000.

★Iowa—State Highway Comn., Des Moines, let contract grading West Hill Rd., from Cherokee to state hospital grounds to G. W. Conden, 1406 W. O. W. Bldg., Omaha.

★Ia., Glenwood—City let contract paving 35,693 sq.yds. streets, including grading, curbing, guttering, etc. to J. A. Beebe, 4201 Commercial Ave., Omaha.

Neb., Lincoln—County received low bids paving Dist. No. 373 from Abel Constr. Co., $43,389; Burke Cochrane Constr. Co., $43,-932.

★S. D., Huron—City let contract 5331 sq. yds. paving, 2334 ft. gutter, 1400 ft. curb and 995 cu.yds. grading to C. H. Atkinson Paving Co., Watertown, $12,892.

★Mo., St. Joseph—Bd. Pub. Wks. let contract grading portion Clay St. to J. F. Buis, 1722 Lafayette St.

★Mo., Kansas City—Park Bd. let contract paving Paseo from Swope Parkway to Swope Park to S. Smith, H. Vaughan, F. Larmer and J. E. Welch. Noted May 31.

★Ark., Clarksville—City let contract paving streets to Bell & Walker. Asphalt Co., Dallas, $33,000.

★Okla., Durant—City let contract paving various streets to E. C. Baum. $31,207.

★Idaho—State Highway Comn. let contract grading 33 mi. highway Washington Co. to S. C. Comerford, West of Joplin Cemetery, $90,000. Noted June 28.

★Utah, Salt Lake City—City let contract paving 9th S, 3rd E and Belmot Sts. to J. W. Mellen, Auditorium Bldg., $60,715; Canyon Rd. to P. J. Moran, Inc., 152 West 2nd St., $4089. Noted June 7.

★Ariz., Phoenix—City let contract paving North 4th St. to D. Jones.

★Washington — State Highway Comn., Olympia, let contract building Inland Empire Highway, Whitman Co. to G. L. Stickler, Pullman, $17,276.

★Wash., Bellingham—Co. Comrs. let contract paving Geneva Rd. to Riddle & Hawkins, Bellingham, $54,235. Noted June 21.

★Wash., Everett—Co. Comrs. let contract paving 2-mi. Arlington-North Fork Rd. to Kiser Paving Co., Everett, $29,380. Noted June 28.

★Wash., Olympia—State Highway Comn. let contract building Olympia Highway to Erickson Constr. Co., 25 Downs Bldg., Seattle, $46,130. Noted May 31.

Wash., Seattle—City received low bids laying concrete sidewalks, Greenwood Ave., et al., L. I. D. 3070, from J. Doyle, $22,264; E. J. McQuade, $22,386; Superior Constr. Co., 1642 Lane St., $23,078.

Wash., Seattle—City received low bids paving Stoneway, L. I. D. 2815, from McHugh Paving & Constr. Co., Beacon and Chicago St., $36,047; R. G. Stevenson, 1327 Erwing St., $36,227.

Wash., Spokane—Co. Comrs. received low bids paving White Rd. No. 23 from Spokane Bitu-Mass Co., Spokane, $55,920.

★Ore., Coquille—County let contract building roads to Grant, Smith & Co., Henry Bldg., Seattle, Wash. $135,000.

★Ore., Fossil—State Highway Comn., Salem, let contract building 3½ mi. John Day Highway to Elliott Contr. Co., McKay Bldg., Portland, $10,550. Noted May 24.

★Cal., Fresno—City let contract improving Madison Ave. to Thompson Bros., Fresno.

★Cal., Stockton—City let contract improving various streets, College Park Dist. to C. Moreing & Sons, Commercial & Savings Bank Bldg., Stockton.

Cal., Stockton—City received low bids paving streets as follows: (a) Resolution No. 557, (b) Resolution No. 558 from Paul & Caldwell (a) $185,917; Clark & Henry Constr. Co., Oschuer Bldg., Sacramento, (a) $186,258 (b) $247,695; Johnson Shea Co., Riverside, (a) $194,496 (b) $260,345.

★Cal., Visalia—County let contract building 8.7 mi. Visalia-Exeter Div. to Tibbetts Pacific Co., San Francisco, $90,478; Visalia-Tulare Div. to J. H. Shafer, $99,892; Earlimart to Pixley Div. to J. F. Benson & Son, San Francisco, $67,692; road from Earlimart to county line stretch to Mesiner & Rice Co., Marsh Strong Bldg., Los Angeles, $72,238.

★Que., Quebec — Provincial Highway Dept. let contract macadamizing highway to A. Carriere, St. Tite de Champlain, $109,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Delaware—Delaware & Maryland Traction Securities Co., recently incorporated at Dover with $5,000,000 capital, will build electric railway in Delaware and Maryland. D. Lindes, Franklin Bldg., Phila., interested.

West Virginia—Morgantown & Wheeling Ry. plans to construct 8 mi. new track. R. D. Hemen, Morgantown, ch. engr.

Florida—Florida East Coast Ry. considering construction of line from Okeechonee to West Palm Peach, about 60 mi. E. B. Carter, St. Augustine, ch. engr.

Ohio—Cleveland, Cincinnati, Chicago & St. Louis Ry. plans to double-track line from Springfield through Bellefontaine to Urbana. C. A. Paquette, Cincinnati, ch. engr.

Kansas—Wichita-Walnut Valley Interurban Ry. secured right-of-way for line from Wichita to Augusta. C. Payne, Wichita, secy.

Texas—San Antonio Traction Co. and San Antonio Gas and Electric Co. will be merged into new corporation to be known as San Antonio Electric Co. with $4,700,000 capital stock. The new company plans to construct an interurban electric line from San Antonio to Austin, about 82 mi., first line to run from San Antonio to Government Aviation Sta. W. B. Tuttle, 309 East Houston St., vice pres.

Texas—Southern Pacific Co. appropriated $200,000 for preliminary expenditures for double-tracking line from El Paso to Tucson, Ariz., about 300 mi. W. Hood, Flood Bldg., San Francisco, ch. engr.

Arizona—Pacific Gas & Electric Co. of Phoenix granted authority by State Corp. Comn. to issue $555,000 bonds, proceeds to be used in making extensions to street railway system, enlarging electric power plant and making other improvements. R. S. Masson, Los Angeles, gen. mgr.

Washington—Chicago, Milwaukee & St. Paul Ry. plans to spend about $125,000 for extending lines to cantonment camp at American Lake near Tacoma. C. F. Loweth, Chicago, ch. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mississippi — Alabama & Mississippi R.R. let contract extending line from Leakesville to connect with line of Wausau Southern Lumber Co. at Laurel, about 35 mi. to Powell & Co., Hattiesburg.

★Tennessee — Nashville, Chattanooga & St. Louis Ry. let contract branch line about 6 mi. long near Dunlap for Chattanooga Coal & Iron Corp. to Lacey Constr. Co., Anniston, Ala. Cost, $150,000.

California—Bd. Pub. Wks., San Francisco, received lowest bid Municipal Ry unit through Twin Peeks tunnel from Eaton & Smith, 407 11th St., San Francisco. About $81,000.

EXCAVATION AND DREDGING

Proposed Work

Ill., Beardstown — Drainage — Comrs. Coal Creek Drainage and Levee Dist. rejected bids opened June 18 for drainage ditches requiring 76,359 cu.yd. excavation. Noted June 28.

Ia., Clinton—See "Streets and Roads."

Minn., St. Cloud — Ditch — County will build Ditch No. 40. About $39,935. N. Thomey, co. aud.

Utah, Salt Lake City—Drainage—Jordan River D. D. will issue $80,000 bonds to reclaim 43,000 acres in Jordan River Basin. Address G. R. Bothwell, 3rd St., E. Noted May 3.

Wash., Centralia—Irrigation—O. L. Waller, vice pres. Washington State College, revived project to irrigate Fords and Waunchs prairies by ditch system leading from Skookumchuck River. An engineer will be employed to make a survey and prepare an estimate of cost of work.

Cal., Los Banos — Irrigation — Panoche Canal Co. plans to construct 5 mi. main canal and 3 pumping plants to irrigate 77,000 acres. About $500,000.

BIDS DESIRED

Tenn., Huntingdon — (Reclamation) — Until July 14, by Carroll Co. D. D. No. 1 for ditches and canals to reclaim 12,500 acres land, requiring about 1,226,000 cu.yd. excava. W. Enochs, co. judge, chn. bd. dir. A. A. Oldfield, Huntingdon, drainage engr.

Ind., Fowler—Ditch—Until July 10, by G. W. Bates, supt. constr., for James Hollingsworth, et al., public ditch; 52, 600-ft. open drain on main line and 5, 100-ft. tile.

Ill., Kankakee—Drainage—Until July 21, by A. Falter, sole comr., Joe Benes D.D., Court House, for constructing entire district involving Bracken, A, B, C, D, Smith, Gladu and Healy Branches. L. C. Looker, engr. dist.

Ia., Indianola—Drainage—Until July 10 by Squaw Creek D.D. No. 4 for new channel. T. Darnell, aud. A. S. Van Sandt, Clarinda, engr.

Ia., Jefferson—Drainage—Until July 10, by Bd. Superv. Greene and Webster Cos., Jefferson, for furnishing 1400 ft. 44-in., 3700 ft. 32-in., 2900 ft. 30-in., 6200 ft. 28-in., 400 ft. 22-in., 2100 ft. 20-in., 2700 ft. 18-in., 100 ft. 16-in., 6300 ft. 14-in., 12,630 12-in., 7330 ft. 10-in., 6130 ft. 8-in., 2885 ft. 7-in., 8545 ft. 6-in., and 220 ft. 5-in. tile; also 220 ft. asorted sewer pipe, 12- to 6-in for Joint D.D. No. 110, Green Co., and No. 221, Webster Co. S. J. Nelson, Jefferson, engr.

Excavation and Dredging (Continued)

Ia., Spencer—Ditch—Until July 10, by A. W. Chamberlain, co. aud., for constructing main open ditch and 2 concrete bulkheads on D.D. No. 37.

Minn., Cambridge—Ditches—Until July 14, by G. C. Smith, co. aud., for County Ditch No. 16, cost, $14,846; No. 17, $11,609; No. 14, $8243. Noted June 28.

Minn., Detroit—(Official)—Ditch—Until July 27, by J. A. Narmun, co. aud., for building extension of branch No. 7 on Co. Ditch No. 15, about 88, 383 cu.yd. excava.; Co. Ditch No. 9, 105, 138 cu.yd. excava. and 2 50-ft. span steel beam pile bridges of creeks.

Minn., Mankato—Ditch—Until July 14, by C. L. Kennedy, co. aud., for Ditch No. 52, about $19,671.

Minn., Redwood Falls—Ditch—Until July 10, by L. P. Larson, co. aud., for County Ditch No. 121. About $10,444.

Minn., Slayton—(Official)—Until July 24, by E. V. O'Brien, co. aud., for repairing Co. Ditch No. 6, about $15,316, and Judicial Ditch No. 19, $35,401.

Minn., Wadena—Ditch—Until July 7, by E. Boss, co. aud., for County Ditch No. 11, requiring 21,283 cu.yd. excavation to cost 12c. per cu.yd. and 16,112 cu.yd. at 15c.

Utah, Lake Shore—(Spanish Fork Post Office)—Official—Drainage—Until July 16, by Superv. Lake Shore & Benjamin D. D., Meeting House, for open drains and covers, tile drains and levee work. J. S. Huff, secy. Caldwell & Richards, Vermont Bldg., Salt Lake City, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★La., Opelousas — (Official)—Drainage—Bayou Mallet and Plaquemine D. D. let contract system involving 42.2 mi. ditch excavation to H. S. Clark, Abbeville, $53,500. Noted May 3.

★Minn., Chaska—Ditch—County let contract Ditch No. 22 to Central Constr. Co., 1450 West Lake St., Minneapolis. About $14,481.

★Minn., Redwood Falls—(Official)—Co. let contract Ditch No. 38 to G. McAllister, Glencoe, 10.85c. per yd. Noted June 21.

★Minn., Waconia — Ditch — County let contract Ditch No. 3 requiring 14,200 ft. 8 to 18-in. tile to N. J. Jensen, Hutchinson.

★S. D., Sioux Falls—Drainage—See "Reinforced Concrete."

★Mo., Puxico—Drainage—Superv. Mingo D. D. let contract system involving 5,000,000 cu.yd. excavation, 53 mi. lateral ditches, etc., to reclaim 32,000 acres to Bartson & Millard, Mayer Bldg., Peoria, and Traut & Osner, Beardstown. About $600,000.

Ont., Hullett — (Official) — Drainage—J. F. Fingland, clk., Londesboro, let contract Kinburn Swamp Brain and river improvement to A. Guhrm Seaforth, about $23,765. Noted June 14.

INDUSTRIAL WORKS

Proposed Work

Mass., Boston—J. J. Johnston, 261 Brookline Ave., Brookline, plans 1-story, 80 x 300-ft. brick garage, Brainerd Rd. and Griggs St. About $160,000. H. F. Bryant, 334 Washington St., archt.

Mass., Boston — See "Reinforced Concrete."

N. J., Bayonne—Babcock & Wilcox Co. plans new brick machine shop, 1st St. and Hobart Ave. About $150,000.

N. J., Harrison—The General Electric Co. had plans prepared by R. H. Canfield, archt., 22 West 4th St., Corning, for 2-story, 135 x 255-ft. glass bulb factory. E. R. Scales, engr., Edison Lamp Wks., Harrison, soon receives bids. About $250,000.

N. J., Jersey City—Armour & Co., Union Stock Yards, Chicago, plans new packing plant, Monmouth and 17th Sts. About $1,000,000.

N. J., Kingsland—(Rutherford Post Office)—(Official) — Bridgeman Smith Co., Kent and Division Aves., Brooklyn, does not plan to build factory as stated in our issue of June 21.

N. J., Linden—Linden Tanning Co., 40 Spruce St., New York City, plans plant on 4-acre site recently purchased here. About $250,000.

N. J., Newark—W. Ball Co. plans 3-story, 90 x 188-ft. factory, St. Francis and Kossuth Sts. About $50,000. J. Greene, 27 Clinton St., archt.

Pa., Palmerton—(Official)—New Jersey Zinc Co., 55 Wall St., New York City, plans 3-story, 60 x 130-ft. laboratory. Cost $200,000. Donn & Deming, archts., 808 17th St., N.W., Wash., D. C., receiving bids about July 30th. Noted June 21.

Pa., Phila.—Fairmount Storage Co., plans 5-story storage factory, 23rd and Brown Sts.

Pa., Pittsburgh—Pittsburgh Electric Mfg. Co., 614 Station St., plans 210 x 220-ft. brick and concrete warehouse, Penn and Lexington Sts. About $50,000.

Md., Baltimore — Baltimore Buggy Top Co., 107 West Mt. Royal Ave., plans 3-story, 75 x 152-ft. factory.

N. C., Wilmington—International Navigation Co., 204 Franklin St., New York, plans new shipbuilding plant, cost, $5,000,000; also steel rolling mills, ship berths, machine shops, etc. W. H. Garland, pres.

N. C., Wilmington—Metal Stamping Co., recently organized with $200,000 capital stock, plans to build 2 factories.

Ga., Brunswick—United States Maritime Constr. Co. plans shipbuilding plant here. About $2,000,000.

Fla., Pensacola—P. H. Brock of Pensacola Feed Co., and others, plan to build meat packing and storage plant here. About $50,000.

Ala., Fairfield—Finance Com. of U. S. Steel Corp., appropriated $11,000,000 to Tennessee Coal, Iron & R.R. Co., a subsidiary, for immediate development here.

La., New Orleans—Dixie Steel Co., recently incorporated with $500,000 capital stock, plans rolling mill. B. W. Seidell of Seidell-Grosz Mfg. Co., 1052 Magazine St., pres.

Tenn., Chattanooga—De Camp Glass Casket Mfg. Co., Memphis, plans to build plant. About $225,000. J. B. Witherington, pres.

Tenn., Chattanooga — Tennessee Paper Mill, recently incorporated with $200,000 capital stock, plans to build mill. J. Stagmaier interested.

O., Cleveland—Baltimore & Ohio R.R. submitted plans to City Council for freight terminal here. About $2,500,000. H. Lane, Baltimore and Charles Sts., Baltimore, ch. engr.

O., Cleveland—Kilby Mfg. Co., 4623 Lakeside Ave., N. E., plans 70 x 135-ft. addition, 49th St. and Lakeside Ave. About $50,000. W. S. Ferguson, 1900 Euclid Bldg., archt.

O., Cleveland—W. M. Lanesman, 1310 Schofield Bldg., plans garage and service plant, Cedar Ave. and Stearns Rd. About $75,000 to $100,000.

O., Cleveland—Standard Steel Co., 3311 West 73rd St., having plans prepared for an addition to provide 15,000 additional square feet floor space; also another steel foundry to be erected in 5 units.

O., Toledo—Toledo Furnace Co. soon lets contract for 6 brick, steel and concrete factories. About $100,000. F. C. Warner, 767 Hipp. Annex Bldg., Cleveland, engr.

O., Youngstown—Liberty Steel Co., increased capital stock from $600,000 to $750,000 and plans to build additions.

Mich., Detroit—Great Lakes Engr. Co., East Atwater St., plans addition to plant. About $75,000. Smith, Hinchman & Grylls, Washington Arcade, engrs.

Mich., Grand Rapids—Furniture Mfg. Assn., 216 Lyon St. N. W., plans warehouse on Fulton St., N. About $100,000.

Ill., Chicago—Gibson Motor Car Co., 923-30 East 47th St., had plans prepared by H. L. Newhouse, archt., 4630 Prairie Ave., for 1-story, brick garage. About $50,000.

Ill., Chicago — Kellogg Switchboard & Supply Co. plans plant on West Adams St. About $200,000.

Ill., Chicago—(East Chicago)—Mark Mfg. Co., Dempster and Dodge Sts., Evanston, plans new plant at East Chicago. About $14,500,000.

Ill., Chicago—H. G. Seal Co., 4410 Ravenswood Ave., plans 2-story, 120 x 125-ft. factory on Ravenswood Ave. About $100,000. W. T. Branitzky, 54 West Randolph St., archt.

Ill., Rock Island—See "Reinforced Concrete."

Wis., Kenosha—See "Reinforced Concrete."

Kan., Wichita — Cumberland Pipe Line Co., subsidiary of Standard Oil Co., plans 5000-bbl. oil refinery, North Lawrence Ave.

S. D., Sioux Falls—International Harvester Co., 606 South Michigan Ave., Chicago, plans to rebuild factory recently destroyed by fire. About $70,000. A. E. Bowring, local mgr.

Mo., Joplin — City defeated $225,000 bonds to build light plant. H. Phillips, clk. Noted May 31.

Mo., Kansas City—Sinclair Refining Co. plans storage tanks and buildings at 811-13 Harrison St. About $100,000.

Tex., Houston—Rio Grande Ice Assn., Harlingen and San Benito, plans ice plant here. About $150,000.

Tex., Orange—National Shipbuilding Co., recently incorporated, plans to build shipbuilding plant here. About $100,000. J. M. Dullahan, stockholder.

Ore., Portland—Hesse-Martin Iron Wks., 434 Belmont St., is having plans prepared for additions to its plant, including foundry, forge shop, etc. About $100,000.

Cal., Los Angeles—C. A. Watson, Alexandria Hotel, plans to build dye works. About $250,000.

Cal., Martinez—Kullman & Salz Tanning Co., had plans prepared for 5-story, 85 x 115-ft. addition to plant.

Cal., San Diego—J. B. Mitchell and L. Figheira of Los Angeles, plan to construct shipbuilding plant on tidelands between 28th and 30th St. About $1,500,000.

Cal., San Francisco — See "Reinforced Concrete."

Ont., London — Beatty Bros., York St., plan factory and boiler house. About $50,000.

Ont., London — Interurban Motors, Ltd., plans garage. About $50,000. G. W. Barburton, 183 Horton St., mgr.

Ont., Springfield — Springfield Milk Co. having plans prepared for addition. About $50,000. A. Ball, mgr.

BIDS DESIRED

N. C., Wilmington—See "Reinforced Concrete."

Fla., St. Petersburg—Until Aug. 1st by Universal By-Products Co. for new plant. About $250,000 to $300,000. J. F. Lavarne, 314 Ferguson Bldg., Pittsburgh, pres. R. Irvin, Union Bank Bldg., archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Vt., Springfield—Jones & Lamson Machine Co. let contract brick and rein.-con. addition to L. E. Hall, $100,000.

★Mass., Holyoke—Valley Paper Co. let contract power house, Water St. to P. J. Kennedy & Co., Inc., $50,000.

★Conn., New Britain—Stanley Wks., Hill and Lake Sts., let contract factory on Myrtle St. to Aberthaw Constr. Co., 27 School St., Boston. About $130,000.

★Conn., Waterbury — (Official)—Scovill Mfg. Co., 99 Mill St. let contract 4-story, 63 x 216-ft. pattern building, East Main St. to Turner Constr. Co., 244 Madison Ave., New York City.

N. J., Camden — See "Reinforced Concrete."

★N. J., Gloucester City — New Jersey Shipbuilding Co., let contract 4 factories to G. F. Pawling & Co., 1400 Vine St., Phila., $1,000,000.

★Pa., Phila. — See "Reinforced Concrete."

★Pa., Phila.—American Stores Co. let contract 3-story, 80 x 120-ft. warehouse, 969-75 North 2nd St. to H. Gill, Jr., 2513 Germantown Ave., $75,000.

★Pa., Phila.—George B. Newton Coal Co., 1527 Chestnut St., let contract 341 x 375-ft. coal storage plant, 13th and Locust Sts., to Armstrong & Co., New Land Title Bldg. About $100,000.

★Pa., Phila. — Phila. Electric Co., 26th and Christian Sts., let contract 1-story, 54 x 64-ft. addition to its plant to J. R. Wiggins Co., 1215 Filbert St. About $60,000.

★Pa., Phila.—Twentieth Century Storage Warehouse Co. let contract, 7-story, 49 x 220-ft. warehouse, 3120-30 Market St. to George & Borst, 277 South 11th St. About $150,000.

★O., Cleveland—Euclid-Doan Co., East 105th and Euclid St., let contract, 146 x 150-ft. markethouse to Crowell-Lundoff-Little Constr. Co., 1957 East 51st St. About $112,000.

★O., Cleveland—Tabor Ice Cream Co., Wayne Ave., let contract 2-story garage and stable to De Hamel Constr. Co., American Trust Bldg. About $70,000.

★O., Cleveland—Warner & Swasey Co., 580 Carnegie Ave., let contract machine shop to Crowell, Lundroff, Little Constr. Co., 1901 East 57th St. About $60,000.

★Mich., Detroit—See "Reinforced Concrete."

★Wis., Madison — Pennsylvania Power Co. let contract 1-story hydro-electric plant to J. R. McDonald, Black River Falls, $500,000.

★Mont., Bowdoin—Great Northern R.R., 11th St. and Hennepin Ave., Minneapolis, let contract engine terminal to Grant, Smith & Co., 1505 News Bldg., St. Paul, $300,000.

★Ont., Toronto—Polson Iron Wks. let contract boiler house to McGregor & McIntyre, 1139 Shaw St. About $60,000.

BUILDINGS

Proposed Work

Conn., Hartford—School—City plans addition to grade school. About $125,000. I. Allen, Jr., 904 Main St., archt.

N. J., Jersey City—Hospital—City plans to improve and enlarge. About $700,000. M. M. Fagan, mayor. J. T. Rowland, 98 Sip Ave., archt.

Pa., Ardmore — School — Lower Merion School Bd., will soon let contract, 1-story, 180 x 190-ft., brick, at Ashland Heights. About $70,000. E. H. Yardley, 1713 Sansom St., Phila., archt.

Pa., Coatesville—Club House—Loyal Order of Moose plans, 4-story, 45 x 140-ft. brick and stone. Kerns & Carroll, 67 South 6th St., archts.

Pa., Tamaqua—Temple—Tamaqua Lodge, F. and A. M., having plans prepared by B. Stevens, archt., 4-story, 40 x 150-ft., stone and terra cotta.

Pa., Tarentum — Hospital—Hospital Aid Assn. of Tarentum, retained P. C. Dowler, archt., Arrot Bldg., to prepare plans 2-story. About $100,000.

Del., Wilmington — Bank — (Official) — Security Trust Co., 6th and Market Sts., had plans prepared, 2-story, 50 x 52-ft. brick and marble addition. E. C. May, Du Pont Bldg., archt., will receive bids in about 2 months. Noted June 21.

Del., Wilmington—Club—B. P. O. E. plans, 6-story, 40 x 1000-ft. brick and stone. J. D Thompson, Jr., Ford Bldg., archt.

Wash., D. C.—Office and Business—A. C. Mather, Commercial Bldg., Chicago, has had plans prepared by C. L. Harding, archt., 729 15th St., N. W. About $150,000.

W. Va., Adamston — High School — Bd. Educ. plans. About $85,000. E. C. Holmboe, Empire Bldg., Clarksburg, archt.

Tenn., Memphis — High School — Bd. Educ. having plans prepared by McGee & Lester, archts., Tenn. Trust Bldg., for Bartlett High School.

O., Cleveland—School—School Bd. having plans prepared by F. C. Warner, archt., 767 Hippodrome Annex. About $200,000.

O., Cleveland—High School—St. Johns Church, 1008 Superior Ave., plans, 3-story, brick and concrete, Euclid Ave. and East 107th St. About $200,000. E. T. P. Graham, 20 Beacon St., Boston, archt.

O., Columbus—Y. M. C. A. will build 5- or 8-story building. O. C. Darst, archt., 1109 Brunson Bldg., receiving bids about July 15. Cost $500,000.

O., Greenville—Hospital—Greenville Hospital Co. plans, 2-story. About $62,000. E. J. Mountstephen, 803 U. B. Bldg., archt.

O., Plymouth — (Official) — High and Grade School—Town will vote July 10 on proposition to construct high and grade school. Althause & Jones, Market Bldg., Mansfield, archts. Noted June 21.

Ind., Indianapolis—School—Indian University had plans prepared by R. F. Daggett, archt., Lemke Annex, for new medical school building.

Ind., West Terre Haute—High and Grade School—T. Concannon, trustee, 217 West 6th St., had plans prepared by D. B. Shourds, archt., 511 Tribune Bldg., Terre Haute, 2-story. About $55,000.

Mich., Benton Harbor—Church—Methodist Congregation plans. About $50,000.

Mich., Chessaning — High and Grade School—Bd. Educ. soon receives bids 2-story, 162 x 184-ft. About $65,000. J. D. Chubb, 108 North Dearborn St., Chicago, archt.

Mich., Detroit—Store—E. J. Hickey Co. purchased site at Woodward and Grand River Aves., and had plans prepared by Smith, Hinchman & Crylls, archts., and engrs., Washington Arcade, for 10-story store building.

Mich., Lansing—Armory—Armory Comn., c/o Col. Versey, State Military Bd., had plans prepared by S. D. Butterworth, archt., Tussing Bldg., 1- and 2-story, 125 x240-ft. About $90,000.

Mich., Muskegon — Armory — Muskegon Armory Comn., c/o F. C. Whitney, retained W. M. Clark, archt., Metz Bldg., Grand Rapids, 1- and 2-story, 90 x 200-ft. About $50,000.

Mich., Muskegon — Armory — Chamber Commerce and State plan. About $50,000.

Ill., East Moline—Y. M. C. A. had plans prepared by Whitsitt & Schulzek, archts., Peoples Bank Bldg., Moline, 4-story, 82 x 101-ft. building. About $100,000. W. E. Mack, Ross Bldg., secy.

Wis., Ashland—High School—Bd. Educ. plans to rebuild school recently destroyed by fire. About $250,000.

Wis., Madison—Grade School—Bd. Educ. had plans prepared by F. L. Kronenberg, archt., 127 North Hancock St., Madison, 60 x 112-ft., brick and hollow tile. About $50,000.

Wis., Manitowoc—Club—Elks' Clubhouse Co. soon receives bids, 2-story, 60 x 90-ft. brick. About $70,000. E. F. Miller, Dempsey Bldg., archt.

Wis., Niagara—High School—Bd. Educ. receiving bids about July 7, 2-story, 56 x 138-ft., brick. Cost, $50,000. D. Hubert, Menominee, archt. Noted May 31.

Wis., Wanwatosa—Sunday School and Church—1st Congregational Church plans. About $50,000. Charlton & Kuenzli, archts., Camp Bldg., Milwaukee, soon receives bids.

Ia., LeMars—College—LeMars Commercial Club conducting campaign to raise $60,000 towards 2 buildings for Western Union College.

Ia., Sioux City—Church—Trinity Lutheran Church receiving bids about Aug. 15, 1-story, 60 x 100-ft., cost, $75,000. Beuttler & Arnold, 609 Security Bldg., archts.

Ia., Sioux City—Hotel—North American Hotel Co. plans. About $750,000. W. B. Nation, mgr.

Minn., Chisholm—Auditorium—City retained A. Puck, archt., 617 Torrey Bldg., Duluth, to prepare plans for large auditorium.

Minn., Duluth—High School—Bd. Educ. receiving bids about Sept. 1. Cost, $375,000. C. E. Nystrom, Palldio Bldg., archt.

Minn., Minneapolis—Store and Office—Abbey Holding Co., plans 90 x 115-ft. brick, 800-08 Mary Pl., about $54,000. V. C. De Brauwere, 824 Plymouth Bldg., archt.

Minn., St. Paul—Church—St. Mark's Congregation will construct. About $100,000.

Kan., Abilene—High School—Bd. Educ. receiving bids about Aug. 1, 2-story, 98 x 150-ft. About $90,000. W. H. Sayler, 606 Gumbel Bldg., Kansas City, Mo., archt. Noted Apr. 26.

Neb., Randolph—Church—Francis De Chantal Congregation had plans prepared by W. L. Steele, archt., 502 Northern Bank Bldg., Sioux City, Ia. About $60,000.

S. D., Sioux Falls—Coliseum—City had plans prepared by J. Schwartz, archt., Pettigrew Bl., 132 x 150 ft. About $100,000.

S. D., Spearfish—Gymnasium—Bd. Educ. having plans prepared by F. H. Ellerbe, archt., 692 Endicott Bldg., St. Paul; 2-story, 100 x 100. F. A. Cook, pres.

Wyo., Casper—City Hall—City voted $270,000 bonds to construct city hall and improve water and sewerage systems.

Mont., Butte—Surgical Building—Deaconess Hospital had plans prepared by F. Hamill, archt., Henessy Bldg. About $150,000.

Mo., Kansas City—Club—Kansas City Club plans, 13th St. and Baltimore Ave. About $750,000. Smith, Rea, & Leavitt, 601 Finance Bldg., archts.

Mo., St. Louis — Church — St. Mary's Episcola Congregation had plans prepared by Nolte & Nauman, archts, Fullerton Bldg., for group buildings at Hamilton and Ridge Aves. About $200,000. L. H. White, rector.

Ore., Portland—Medical School—University of Oregon having plans prepared by Lawrence & Holford, archts., and Whitehouse & Fourlhoux, assoc. archts. About $125,000.

Cal., Norwalk—Hospital—State having plans prepared by B. G. McDougal, state archt., Sheldon Bldg., Sacramento, brick and concrete. About $132,000.

Cal., Palo Alto—High School—See "Reinforced Concrete."

BIDS DESIRED

Conn., Hartford—Dining Hall, etc.—Until July 13, by State Comptroller, Capitol, for infirmary, dining hall, etc., for Storrs Agricultural College. About $75,000.

N. Y., Yonkers—(Official)—Sshool—Until July 10, by Secy. Bd. Educ., for P. S. No. 23. About $200,000. C. H. Chamberlin, 18 South Bway., archt. Noted June 21.

O., Akron — (Official) — School — Until July 20, by J. F. Barnhart, clk., bd. educ. for annex to Jennings School, East Talmadge Ave. and Dayton St. T. H. Kelley, Cottage Pl., superv. archt.

O., Alliance—Until July 9 by W. H. Morgan, clk. bd. hospital comrs., for alteration and additions to old city hospital. V. W. Matchett, archt.

O., Martins Ferry—(Official)—School—Until July 21, by Bd. Educ. for Elms School. C. W. Bates, Natl. Bank Bldg., Wheeling, W. Va., archt.

Ind., Anderson—Lodge—Until July 10 by [illegible]. D. McLane, archt., 301 Robinson Bldg., 2-story, 70 x 100-ft. for B. P. O. E. About $100,000. Noted June 21.

Ind., Ft. Wayne—Until July 31 by A. Hamilton, trustee, Wayne Twp., for building new school and altering 2 others.

Ind., Terre Haute—School—Until July 11 by T. Concannon, trustee, Sugar Creek Twp.

Ia., Bronson — (Official) — School—Until July 10, by Bd. Educ. About $50,000. Buettler & Arnold, 609 Security Bldg., Sioux City, archts. Noted June 21.

Ia., Cresco—School—Until July 16 by B. F. Davis, secy. bd. educ. G. L. Lockhart, 391 Endicott Bldg., St. Paul, archt.

Minn., St. Peter — Court House — Until July 9 by W. H. Holtz, co. aud., for addition. G. Pass & Son, Manakota, archt.

Kan., Great Bend—Court House—Until July 19, by W. E. Beardsley, co. clk., 4-story, 95 x 114 ft. About $150,000. W. E. Hulse & Co., 1st Natl. Bank Bldg., Hutchinson, archts.

Mont., Livingston—High School—Until July 21, by Bd. Trustees Park Co. High School for addition. About $60,000. G. H. Carsley, Power Blk., Helena, archt. Noted June 21.

Cal., Palo Alto—Until July 13, by Union High School Dist., for high school to consist of 7 buildings. About $200,000. Allison & Allison, 1405 Hibernian Bldg., Los Angeles, archts. Noted June 14.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Gardner—School—Town received low bid school on Coleman St., from Allen Bros., Amherst. About $60,000. Noted May 17.

★Mass., Norwood—School—Bd. Educ. let contract, 3-story, 97 x 210-ft., Hoyle, Washington and Bond Sts., to C. S. Cunninham & Sons, 7 Water St., Boston. Noted May 31.

★Pa., Phila.—Library—City let contract 1-story brick and stone, on Old York Rd. to Wark-Yardley Co., 1737 Filbert St., $68,555.

★O., Canton—School—City let contract to R. H. Evans & Co., Columbus Saving Bank Bldg., for addition to Clarendon Ave. School. About $58,531.

★Ia., College Springs—School—Bd. Educ. let contract 3-story, 72 x 134-ft., brick, stone and concrete, to S. Hotchkiss, 18th St. and Penn Court, St. Joseph, Mo., $65,000. Noted May 24.

★Minn., Minneapolis—Exchange Northwestern Telephone Exchange Co., 816 21st Ave., N., let contract, 3-story, brick, steel and tile, Highland Park, to J. H. Brous Co. About $82,000.

★S. D., Sioux Falls—Bank—Sioux Falls Natl. Bank let contract 9-story, 44 x 106-ft. brick and terra cotta, to Pike & Cook, 416 South 6th St., Minneapolis.

★N. D., Drake—School—Bd. Educ., let contract, 3-story, to R. B. Marschke, Lucca, $68,855.

★N. D., Fargo — Office — North Dakota Realty Co. let contract 8-story, 75 x 118-ft., to T. Powers & Co., Fargo. About $100,000.

★Mo., Mexico—Academy—Missouri Military Academy let contract addition to Ray & Son Constr. Co., Louisiana, $50,000. Noted May 24.

★Mo., St. Louis—Hotel—Roe Estate let contract remodelling and improving building for hotel to H. Horowitz, 521 Boatmen's Bank Bldg. About $100,000.

★Tex., Victoria—High School—Victoria Independent School Dist. let contract, 3-story, brick, to S. M. Bailey, Victoria. About $54,487.

Buildings (Continued)

★**Okla., Tulsa—Freight House—St. Louis** & San Francisco Ry. let contract, 40 x 330-ft. to C. Cunliff, Title Guarantee & Trust Bldg., St. Louis, $100,000.

★**Cal., Los Angeles**—Store—See "Reinforced Concrete."

FEDERAL GOVERNMENT WORK

Proposed Work

Pa., State College — Post Office — J. A. Wetmore, superv. archt., treas. dept., rejected only bid received June 12. Noted June 21.

Wash., D. C.—Repair Shop—Bureau of Yards and Docks, Navy Dept., rejected only bid received June 25 for addition to Nautical Instrument Repair Shop at Naval Observatory. Noted June 14.

N. C., Chapel Hill—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected only bid received June 15. Noted June 28.

BIDS DESIRED

Mass., Winchester—Post Office—Until Aug. 3, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Conn., New London—Storehouse—Until July 9, by Bureau of Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., at Naval Sta.

N. J., Dover—Buildings—Until July 16, by Bureau of Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., addition to 8 magazine buildings.

S. C., Columbia—Post Office—Until July 31 by J. A. Wetmore, superv. archt., treas. dept., Wash.

Neb., Chadron—Post Office—Until July 31 by J. A. Wetmore, superv. archt., treas. dept., Wash.

Mo., St. Louis—Levee Work—Until July 16, by Mississippi River Comn., 1311 International Life Bldg., constructing about 80,000 cu.yd. earth work in Henderson Co. D. D. No. 1, Ill.

Okla., Cherokee — Power Plant — Until July 25, at office of Indian Affairs, Interior Dept., Wash., electric power plant, wire fixtures, etc., at Cherokee Orphan Training School.

Ariz., Globe—Post Office and Court House—Until Aug. 6 by J. A. Wetmore, superv. archt., treas. dept., Wash.

Wash., D. C.—Portland Cement—Until July 10 by U. S. Engr. Office, Room 305, Southern Bldg., furnishing and delivering at foot of 35th St., 15,000 bbls., more or less.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. H., Portsmouth—Office Building—Bureau of Yards and Docks, Navy Dept., Wash., received bids, June 25 from F. W. Cunningham, 430 Congress St., Portland, Me., $32,423; C. H. Mead, 15 Beacon St., Boston, $41,664; C. M. Leach, Boston, cost plus 10%.

Mass., Ft. Andrews—Reservoir—Constr. Quartermaster, Ft. Warren, received bids, June 23, as follows: R. L. Whipple Co., Worcester, cost plus 10%; Hallett-Grant Constr. Co., 138 Federal St., Boston, $16,987, alternate bid, actual cost plus $1400; Hampshire Constr. Co., 108 South St., Boston, $16,900.

N. J., Vineland—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, June 27, (a) limestone, (b) sandstone, as follows: Werner-Huberty Co., 657 Vanderbilt Ave., Brooklyn, N. Y., (a) $55,497; W. H. Fissell & Co., 1328 Bway., New York City, (a) $62,700, (b) $65,700; Metzger & Fisher Co., Denckla Bldg., Phila., (a) $64,614, (b) $64,614. Noted June 7.

Pa., Monessen—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received only bid, June 26, from W. H. Fissell & Co., 1328 Bway., New York City, limestone, $57,000, sandstone, $58,000. Noted May 31.

Pa., Phila.—Storehouse—Bureau of Yards and Docks, Navy Dept., Wash., received bids, June 25, advance base storehouse as follows: (a) Net price and time for work, complete, in accordance with drawings and specifications, and based on use of solid brick for exterior walls. This item does not include heating, trolley, trolley beams and fittings. (b) Amount and time to be added to price and time stated under item (a) if trolley, trolley beams, and fittings as specified in paragraphs 130 to 133, inclusive, be installed; E. Baton, 12th and Sansom Sts., Phila., (a) $86,000, 140 days; (b) $3100, 10 days; McCloskey & Bahles, Phila., (a) $83,748, 150 days; (b) $3415; Turner Concrete Steel Co., 1713 Sansom St., Phila., (a) $89,750, 120 days.

Md., Annapolis—Artesian Well—Bureau of Yards and Docks, Navy Dept., Wash., opened bids June 25, artesian well at Naval Academy, from Sydnor Pump & Well Co., Inc., 1301 East Main St., Richmond, $8 per ft., 60 days, alternate bid, cost plus 10%; bid not in accordance with specification. E. Christmann, Massillon, O., $13,668, 60 days. Noted June 14.

★**Md., Cambridge**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to T. H. Mitchell, 207 Lake St., Salisbury, $49,089. Noted May 17.

★**Wash., D. C.** — Buildings — Bureau of Yards and Docks, Navy Dept., let contracts mine storage buildings as follows: 6 at St. Juliens Creek, Va., to Boyle-Robertson Constr. Co., Evans Bldg., $2[illegible]28; 3 at Newport, R. I., M. F. Kelly, 5[illegible] East 42nd St., New York City, $154,42[illegible]; [illegible] at Hingham, Mass., Howard Bros., 41[illegible] Dorchester Ave., Boston, $73,863; 2 at Iona Island, N. Y., Guarantee Constr. Co., 140 Cedar St., New York City, $93,550; 1 at Guantanomo, Cuba, Stewart Eng. Corp., 61 Bway., New York City, $57,600. Noted May 31.

Wash., D. C.—Bridges—Dist. Comrs. received bids, June 16, 2 bridges on line of [illegible]st St. from: E. G. Gumel, 36 P St., 10%; W. H. Allen Constr. Co., 12%; L. N. Johnson, Arlington, Va., 18%; C. H. Tompkins, Wash., 18%, cost plus percentage. Noted June 14.

★**Fla., Pensacola**—Storehouse and Magazine Building—Bureau of Yards and Docks let contract to Wise Granite & Constr. Co., American Natl. Bank, Richmond, $[illegible]9 800. Noted June 21.

★**Fla., Pensacola**—Testing Shed—Bureau of Yards and Docks, Navy Dept., Wash., let contract testing shed for seaplane motors at Navy Aeronautic Sta. to Turner Constr. Co., Pensacola, $23,600, time 90 days.

S. C., Beaufort—Post Office—J. A. Wetmore, superv. archt., treas. dept., received bids June 20, from Wise Granite & Constr. Co., American Natl. Bank, Richmond, $40,990, and W. H. Fissell & Co., 1328 Bway., New York City, $47,900. Noted May 17.

S. C., Port Royal—Buildings—Bureau of Yards and Docks, Navy Dept., Wash., received bids, June 25, 8 buildings for officers' quarters (work complete), from W. T. Hadlow, 831 Park St., Jacksonville, $46,735, time, 100 days; Newport Contr. & Engr. Co., Newport News, Va., $54,063; 100 days; Simons-Mayrant Co., Charleston, $56,197, 100 days; Riggs, Distler & Stringer, 23-25 Light St., Baltimore, $9981, 100 days (partial bid).

★**Ill., Aledo**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to Northern Constr. Co., 421 Milwaukee St., Milwaukee, $42,675. Noted June 28.

★**Ill., Olney**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to Michie Constr. Co., 300 Camp Bldg., Milwaukee, $44,970; time, 1 year. Noted June 14.

★**Kan., Cherryvale**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to C. Weitz Sons, 713 Mulberry St., Des Moines, $38,300. Noted June 28.

★**Mo., Butler**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to C. Weitz Sons, 713 Mulberry St., Des Moines, $42,400. Noted June 28.

★**Ark., Fordyce**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to W. O'Neil & Sons Co., Faribault, Minn., $31,979. Noted June 28.

★**Wash., Bremerton** — Dock — Bureau of Yards and Docks, Navy Dept., Wash., let contract shipbuilding dock at Puget Sound Navy Yard to Sound Constr. & Eng. Co., 72 Union St., Seattle, about $566,000. Noted June 7.

Cal., San Francisco—Pipe Line—Bureau of Yards and Docks, Navy Dept., Wash., received only bid, June 25, 6-in. flexible joint submerged pipe line at Naval Training Sta., (a) work complete, (b) work complete, pipe to be extra strong, galvanized, joints reinforced with malleable iron reinforcing steels, (c) deduct from (b) for substituting 5-in. pipe line, from Healey-Tibbitts Constr. Co., 9 Main St., San Francisco, (b) $49,249, time, 120 days; (c) $6650. Noted June 21.

★**Cal., San Pedro** — Buildings — Constr. Quartermaster, 12th and Pacific Aves., let contract officers' quarters, barracks and other buildings at Ft. MacArthur to J. F. Atkinson, 610 South Bway., Los Angeles, about $249,000. Noted Apr. 26.

MISCELLANEOUS

Proposed Work

Port Terminal — Bayonne, N. J. — City Comrs. will hold election July 24 to vote on $10,000,000 bonds for port terminal along New York Bay. Address Terminal Com. Bergoff Bldg., Bway. and 22nd St. Noted May 31.

Elevated Railway—East Orange, N. J.—Delaware, Lackawanna & Western R.R. will elevate lines through city. G. J. Ray, Hoboken, ch. engr.

Pier—Phila., Pa.—See "Reinforced Concrete."

Transmission Line—Mosinee, Wis.—Wisconsin Valley Electric Co. plans, from Mosinee to Stevens Point. M. E. Ewing, Wausau, mgr.

Transmission Lines—Grinnell, Ia.—Iowa Light, Heat & Power Co. plans to extend lines from Grinnell to Newburg, about 7 mi. L. E. Caldwell, Iowa City, mgr.

Transmission Line—Hamilton, Ia.—Keokuk Electric Co. will reconstruct its transmission line from Hamilton to Warsaw, 5 mi. J. P Ingle, Keokuk, mgr.

Transmission Line — Lexington, Neb.—Lexington Mill & Elevator Co., owners of local electric-light plant, applied to State Ry. Comn. for permission to build, from Lexington to Cozard, about 18½ mi. A. C. LeFlang, Lexington, mgr.

Park Improvements—Beaumont, Tex.—City will hold election Aug. 7 to vote on $100,000 bonds for park improvements. J. G. Sutton, clk.

BIDS DESIRED

Fire Towers—Trenton, N. J.—(Official)—Until July 13th by New Jersey State Hospital, building fire tower, fire escapes, etc. F. H. Bent, state archt.; advertised in this issue.

Subway—Red Bluff, Cal.—See "Reinforced Concrete."

Incinerator—Outremont, Que.—Until July 18 by E. T. Thompson, city clk., building incinerator.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Dam—Albany, N. Y.—(Official)—W. W. Wotherspoon, supt. pub. wks., received bids, June 26, new movable dam to replace existing dam No. 14 at Herkimer, Barge Canal Contr. No. 146, from Lupfer & Remick, Ellicott Sq., Buffalo, $80,335; Chesley, Earl & Heimbach, Inc., 20 Breckenridge St., Buffalo, $90,043; Mohawk Dredge & Dock Co., Inc., Herkimer, $101,981. Noted May 31.

★**Boilers, etc.—Newark, N. Y.**—(Official)—A. W. Beaven, pres. bd. mgrs., New York State Custodial Asylum for Feeble-Minded Women, let contract 2 boilers to W. B. Armstrong Co., $14,378; heating work, etc., W. F. Devendorf & Co., $13,398. Noted June 14.

★**Piers—Wash., Spokane** — See "Reinforced-Concrete."

★**Boardwalk—Newport Beach, Cal.**—City let contract, on Surf Ave., to G. Helms, Newport Beach, about $14,091.

George L. Dresser, representing the Jennsion-Wright Co., Toledo, O., has moved his offices from DeGraaf Bldg., Albany, N. Y., to 2632 Whitehall Bldg., New York City.

Rolph Mills & Co., Colman Bldg., Seattle, have been appointed general agents for the U. S. Cast Iron Pipe & Fdry. Co., Burlington, N. J., in Oregon and Washington.

L. H. Boydston has been appointed sales manager for the Smith Form-A Tractor Co., Chicago, Ill.

The Blaw Steel Constr. Co. and the **Knox Pressed & Welded Steel Co.** have been consolidated under the name of the Blaw-Knox Co., with executive offices at Hoboken, Pa., general offices in th Farmers Bank Bldg., Pittsburgh, Pa., branch offices at New York, Chicago, Boston and San Francisco and works at Hoboken and Wheatland, Pa.

TRADE CATALOGS

Concrete Construction Appliances. Gemco Mfg. Co., Milwaukee, Wis. Descriptive catalog; pp. 24; 5½ x 8½ in.; illustrated. Includes adjustable shores, scaffold hangers, form and trench braces, column clamps, etc.

Concrete Mixers and Mixing. Koehring Machine Co., Milwaukee, Wis. Catalog No. 21; pp. 123; 7½ x 10½ in.; illustrated. Besides descriptions of various concrete mixers and outfits (including hot mixers), this deals with the proper time of mixing, the automatic measuring of water, and the use of the Koehring batch meter to ensure the mixing of each batch for a specified time.

SEARCHLIGHT SECTION

Contracts To Be Let

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a. m. for issue mailed the next day

PROPOSALS

Bids received until July 13, 1917.

Barge Canal Terminals

STATE OF NEW YORK, OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, N. Y., June 15th, 1917.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Friday, July 13th, 1917, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

TERMINAL CONTRACT NO. 103.

For furnishing, installing and testing portable package freight conveyors for terminals at Rochester, Utica and Schenectady.

Contract plans sheets 1 and 2.

Plans may be seen and detailed specifications, engineers' estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans of drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the City of Albany or New York, issued by a national or State bank, in good credit within the State and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby. W. W. WOTHERSPOON,
Superintendent of Public Works.

Bids received until July 12, 1917.

Deep Well Pump and Motor

Cuba City, Wis.

Sealed proposals will be received at the office of the Village Clerk, Cuba City, Wisconsin, at eight (8) o'clock P. M. on the 12th day of July, 1917, for drilling a deep well and installing a new pump and motor, consisting of the following approximate quantities:

250 lin.ft.—12 in. well cased complete.
500 lin.ft.—10 in. hole.
Deep well pump and pump head in place.
Motor in place.

Payment to be made in cash. Certified check on Cuba City bank for $500. Plans and specifications and forms on file with the Village Clerk or Engineer.

WALTER BREWER,
Village Clerk.

J. G. Thorne & Company, Engineer,
317 Howes Block,
Clinton, Iowa.

UNITED STATES ENGINEER OFFICE, Room 710, Army Building, 39 Whitehall Street, New York, N. Y.—Sealed proposals for dredging in Wappinger Creek, N. Y., and in harbors at Tarrytown and Peekskill, N. Y., will be received here until 12 M., July 30, 1917, and then opened. Further information on application.

PROPOSALS

Bids received until July 9, 1917.

OFFICE OF THE STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p. m. on Monday, the 9th day of July, 1917, for the repair of highways in the following counties:

Albany (two contracts—resurfacing and reconstruction).
Broome (two contracts—resurfacing)
Cattaraugus (one contract—resurfacing).
Chautauqua (one contract—reconstruction).
Columbia (one contract—reconstruction).
Erie (one contract—resurfacing).
Essex (one contract—resurfacing).
Greene (one contract—surface treatment).
Herkimer (one contract—surface treatment).
Jefferson (one contract—resurfacing).
Livingston (two contracts—resurfacing).
Monroe (one contract—resurfacing).
Oneida (two contracts—resurfacing and surface treatment).
Ontario (one contract—resurfacing).
Orange (one contract—reconstruction).
Oswego (two contracts—surface treatment).
Otsego (one contract—reconstruction).
Saratoga (one contract—resurfacing).
Seneca (one contract—resurfacing).
Steuben (one contract—resurfacing).
Washington (one contract—surface treatment).

Also broken stone contract No. 74, Erie County, on Road 1038 for No. 1 Stone 450 tons.
No. 2 Stone 375 tons.
No. 3 Stone 3200 tons.

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineer and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

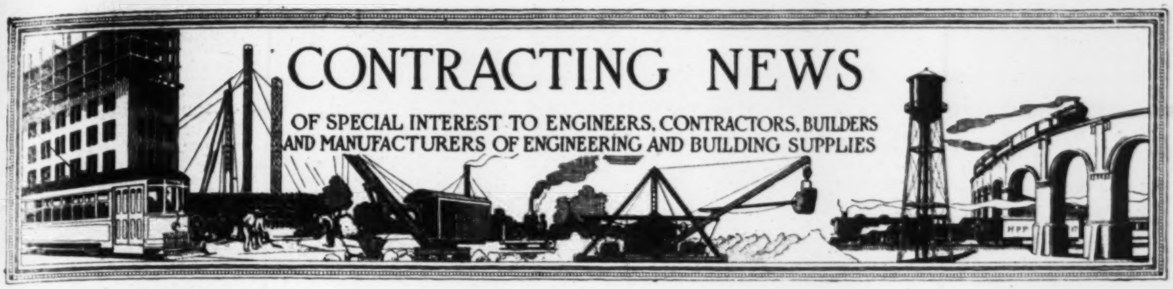
Bids received until July 10, 1917.

Log Road Construction

Putnam, Va.

Bids will be received by the undersigned for the grading of 6 miles of standard gauge log road in Russell and Buchanan Counties, Virginia, according to Plans and Specifications, which can be seen at the office of the undersigned at Putnam, Va., or at the office of J. P. Williams, Jr., Chief Engineer, Tazewell, Va.

WHITE OAK LUMBER CO.
Bids close July 10th, 1917.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 53 to 59 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
July 16.	Belle Plaine, Minn.	July 12
July 17.	New York, N. Y.	June 14
	Adv. June 7 to 28 and July 5.	
July 17.	Brooklyn, N. Y.	July 12
July 19.	Newark, N. J.	July 12
July 25.	Waverly, Ia.	July 12
Sept. 11.	New York, N. Y.	July 12

SEWERS

Bids Close		See Eng. News-Record
July 16.	Camden, N. J.	July 12
July 17.	Davenport, Ia.	July 12
July 17.	Hamilton, O.	July 12
July 17.	Toronto, Ont.	July 12
July 18.	Phila., Pa.	July 12
July 19.	Cleveland, O.	July 12
July 21.	Hagerstown, Md.	July 12
July 23.	Wingdale, N. Y.	June 28
	Adv. June 28 to July 12.	
July 24.	Crosby, Minn.	July 12
July 31.	Linndale, O.	July 5
July 31.	Glenwood, Minn.	July 12
Aug. 1.	Atwater, Minn.	July 12
Aug. 1.	Hazeltown, Md.	July 12

STRUCTURAL STEEL WORK

Bids Close		See Eng. News-Record
July 15.	Orange, Tex.	June 7
	Adv. June 7 to 21.	
July 17.	West Palm Beach, Fla	June 21
	Adv. June 21.	
July 17.	Quincy, Ill.	July 12
July 19.	Virginia City, Mont.	July 12
July 25.	Warren, O.	July 12
July 30.	New York, N. Y.	July 12
Aug. 2.	Miami, Fla.	June 28
	Adv. June 28 and July 5.	
Aug. 14.	Brazil, Ind.	July 12
Aug. 16.	Hamlin, W. Va.	July 12

REINFORCED CONCRETE

Bids Close		See Eng. News-Record
July 14.	Quincy, Ill.	July 5
July 15.	Kansas City, Kan.	June 28
July 16.	Berkeley Springs, W. Va.	June 28
July 16.	Colfax, Wash.	July 12
July 17.	Geneva, Neb.	June 28
July 17.	New Brunswick, N. J.	June 28
	Adv. June 28 and July 5.	
July 17.	Owantonna, Minn.	July 12
July 19.	Marion, Ind.	July 12
July 27.	Somerville, N. J.	July 12
July 28.	Sullivan, Ind.	July 12
July 30.	Watsontown, Pa.	July 5
Aug. 6.	Greenville, Miss	July 12

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 14.	Medina, O.	July 12
July 14.	Richmond, Va.	July 12
July 14.	Indiana	June 14
July 14.	Pine Bluff, Ark.	June 28
July 14.	Lincoln, Neb.	July 5
July 14.	Rochester, Ind.	July 5
July 14.	Hightstown, N. J.	July 12
July 16.	California	June 28
July 16.	Victoria, Tex.	July 12
July 16.	Union, N. J.	July 12
July 16.	Elizabeth, N. J.	July 12
July 16.	Ashland, O.	July 12
July 16.	Grayville, Ill.	July 12
July 16.	Westfield, N. J.	July 12
July 17.	Seattle, Wash.	July 12
July 17.	Princeton, N. J.	July 12
July 17.	Henderson, Ky.	July 12
July 17.	Baltimore, Md.	July 12
July 18.	Zanesville, O.	July 12
July 18.	Belvidere, N. J.	June 28
	Adv. June 28 to July 12.	
July 16.	Port Orchard, Wash.	July 5
July 18.	Hawthorne, N. J.	July 5
July 18.	Davenport, Ia.	July 12
July 19.	Flemington, N. J.	June 28
July 19.	McCormick, S. C.	July 12
July 20.	Cincinnati, O.	July 12
July 20.	Walla Walla, Wash.	July 12
July 21.	Wauseon, O.	July 5
July 23.	Indiana	July 12
July 24.	Pennsylvania	July 12
July 24.	Pennsylvania	June 28
July 24.	Pottstown, Pa.	July 12
July 25.	Warsaw, Ind.	July 12
July 25.	Indiana	July 12
July 25.	Idaho	July 5
Aug. 6.	Clifton, Ariz.	July 12
Aug. 7.	Indiana	July 12
Aug. 13.	Lewiston, Idaho	May 24
Aug. 16.	Hamlin, W. Va.	July 12

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
July 25.	Brooklyn, N. Y.	July 12
Aug. 1.	St. Petersburg, Fla.	July 5

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
July 14.	Cambridge, Minn.	July 5
July 14.	Huntington, Tenn.	July 5
July 14.	Mankato, Minn.	July 5
July 16.	Hanna, Ill.	June 28
	Adv. June 28 to July 12.	
July 16.	Lake Shore (Spanish Fork Post Office)	July 5
July 16.	Mason City, Ia.	July 12
July 16.	Canyon City, Ore.	July 12
July 18.	Glenwood, Ia.	June 21
	Adv. June 21 and 28 and July 5.	
July 18.	Des Moines, Ia.	July 12
July 18.	Calhoun, Ky.	July 12
July 19.	Morris, Minn.	July 12
July 19.	Greenville, Miss.	June 28
	Adv. June 21 and 28.	
July 20.	St. Cloud, Minn.	June 21
July 20.	Nevada, Ia.	July 12
July 21.	Kankakee, Ill.	July 5
July 23.	Marshall, Minn.	July 12
July 24.	Slayton, Minn.	July 5
July 25.	Dyersburg, Tenn.	July 12
July 27.	Detroit, Mich.	July 5
July 30.	Walker, Minn.	July 12
July 31.	Susanville, Cal.	July 12
Aug. 1.	Sac City, Ia.	July 12

BUILDINGS

Bids Close		See Eng. News-Record
July 16.	Great Bend, Kan.	June 28
July 16.	Cresco, Ia.	July 5
July 16.	Blue Hill, N. D.	July 12
July 16.	Mapleton, Ia.	July 12
July 16.	Monte Vista, Colo.	July 12
July 18.	Concordia, Kan.	June 28
July 18.	Randolph, Minn.	July 12
July 19.	Shenandoah, Ia.	June 28
July 20.	Akron, O.	July 5
July 21.	Greencastle, Ind.	July 12
July 21.	Jacksonville, Fla.	July 12
July 21.	Martins Ferry, O.	July 5
July 21.	Livingston, Mont.	July 5
July 23.	Hoisington, Kan.	July 12
July 23.	Columbus Jct., Ia.	June 28
July 24.	Crosby, Minn.	July 12
July 30.	Ft. Wayne, Ind.	June 28
July 31.	Ft. Wayne, Ind.	July 5
Aug. 1.	Stillwater, Okla.	July 12
Aug. 1.	Ft. Wayne, Ind.	July 12
Aug. 20.	Troy, N. Y.	July 12

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
July 16.	Newburyport, Mass.	June 14
July 16.	Charleston, W. Va.	June 28
July 16.	Dover, N. J.	July 5
July 16.	St. Louis, Mo.	July 5
July 16.	Phila., Pa.	July 12
July 17.	Jasper, Ala.	July 12
July 18.	St. Ignatius, Mont.	June 21
	Adv. June 21.	
July 20.	Ft. Fairfield, Me.	June 21
July 21.	St. Louis, Mo.	July 12
July 23.	Cincinnati, O.	June 28
	Adv. June 21 to July 12.	
July 25.	Cherokee, Okla.	July 5
July 25.	Mare Island (Vallejo P. O.), Cal.	July 12
July 25.	Puget Sound (Bremerton P. O.), Wash.	July 12
July 26.	Key West, Fla.	July 12
July 26.	Gallatin, Tenn.	June 28
	Adv. June 21 and 28.	
July 27.	Vernon, Tex.	June 28
July 30.	New York, N. Y.	July 12
July 30.	Keyport, Wash.	July 12
July 30.	San Antonio, Tex.	July 12
July 30.	Newport, R. I.	July 12
July 31.	Chardon, Neb.	July 5
Aug. 3.	Winchester, Mass.	July 5
Aug. 6.	Globe, Ariz.	July 5
Aug. 14.	West Point, Ga.	July 12
Aug. 17.	Wash., D. C.	July 12

MISCELLANEOUS

Bids Close		See Eng. News-Record
July 16.	Street Signs, Camden, N. J	July 12
July 18.	Incinerator, Outremont, Que.	July 5

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., Olean—Bd. Water Comrs. asked City Council to issue $75,000 bonds to install filtration plant. W. Sheehan, supt.

N. J., South Orange—See "Sewers."

Pa., Mt. Joy—City having plans prepared by Gannett, Seelye & Fleming, engrs., 204 Locust St., Harrisburg, for filter plant. About $15,000. H. M. Stauffer, chn.

Fla Appalachicola—City plans waterworks extension involving 4500 ft. 6-in. and 2000 ft. 8-in. piping and connections. About $15,000. Address Comr. Pub. Wks.

Fla., St. Augustine—City having plans prepared for water-works improvements. A. J. Pelier, supt.

O., Greenville—City will sell $60,000 bonds July 25 for water-works improvements. G. A. Johnson, 150 Nassau St., New York City, engr. Noted July 5.

Ind., Lawrenceburg—City having plans prepared by A. Karsteter, engr., for waterworks. About $40,000. J. M. Fraezer, clk.

Wis., Superior—Council plans to install 12-in. water main, 28th St. About $20,000. A. Lounsberg, supt.

Minn., Duluth—City will appropriate $40,000 for installing electric pump at Lakewood pumping station. W. Palmer, ch. engr.

Minn., Ogilvie—Village having plans prepared by J. F. Druar, engr., 312 Commercial Bldg., St Paul, for water system. M. Sand, village clk.

Minn., St. James—City soon lets contract constructing 225,000 gal. reservoir. J. H. A. Brahtz, Mankato, engr.

Kan., Altoona—City voted $30,000 bonds to enlarge water and electric-light systems. W. B. Rollins & Co., 209 Ry. Ex. Bldg., Kansas City, Mo., engrs. Noted June 7.

Kan., Clearwater—City soon lets contract for water-works improvements, including generator, oil engine and pump. F. Murphy, clk. W. B. Rollins & Co., 209 Ry Ex. Bldg., Kansas City, Mo., engrs.

Water-Works (Continued)

N. D., Dickinson—City plans to extend water and sewerage systems, about 10,000 ft. Address City Engr.

N. D., Towner—(Official)—City rejected bids underground reservoir. Noted June 28. A. M. Berget, city aud.

Mo., East Alton—See "Sewers."

Mo., Kansas City—City plans laying 4½ mi. of 48-in. c.-i. main along south side of Kaw River. B. Lowther, supt.

Tex., Abilene—City election Aug. 15 to vote on $50,000 bonds for constructing storage reservoir to have capacity of 5,000,000,000 gal. Noted June 21.

Tex., Abilene—City plans to install pumping plant and improve present water system. About $500,000. W. A. Riney, city engr.

Okla., Ada.—City having plans prepared for improving water-works; including new rein.-con. flume 36 in. in diam. at Byrds Mill, new intake, laying new water mains and 50,000-gal. capacity, elevated tank, etc.

Okla., Enid—City voted $50,000 bonds to extend water-works. F. N. Brooks, supt.

Okla., Waurika—City election soon to vote on $15,000 bonds for improving water system. Address City Clk.

Utah, Salt Lake City—See "Sewers."

Wash., Seattle—City having plans prepared for water mains in Alki Ave. About $45,000. A. H. Dimock, city engr.

Wash., Walla Walla—City having plans prepared for reservoir and improving water-works system. About $80,000. R. F. McLean, supt.

Wash., Wenatchee—City plans pipe line to the Squilchuck, filter plant at Okanogan St. reservoir and other improvements to water-works; filter to cost $33,000. C. T. White, comr.

Cal., Vallejo—City plans additional dam on Green Valley Creek to increase water supply. About $80,000. O. Von Geldern, Pacific Bldg., San Francisco, engr.

N. B., Edmuston—Town plans addition to aqueduct, sewerage and electric systems. About $75,000.

Ont., Weston—See "Reinforced Concrete."

BIDS DESIRED

N. Y., Brooklyn—Until July 17, by W. Williams, comr. water supply, Gas and Electricity, Municipal Bldg., New York City, furnishing, delivering, unloading, stacking and storing c.i. pipe, special and valve box castings, valves and double-nozzle fire hydrants.

N. Y., New York—(Official)—Until Sept. 11 (change of date), by Bd. Water Supply, 22 floor, Municipal Bldg., Park Row, Centre and Chambers Sts., for Shandaken tunnel, as part of Schoharie watershed development for New York City water supply; advertised in this issue.

N. J., Newark—Until July 19, by Bd. St. and Water Comrs., for 2500 water meters. M. R. Sherrerd, city engr.

Ia., Waverly—(Official)—Until July 23 by City for installing 200,000-gal. rein.-con. reservoir and 1200 ft. 12-in. c.-i. pipe and extensions to concrete dam, etc. Former bids rejected. F. A. Lee, clk. C. P. Chase, Clinton, engr. Noted June 28.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston**—City let contract laying water pipe and appurtenances for high pressure fire distribution system M. D. Sisto, 198 Lagrange St., Roxbury. About $63,237.

★**O., Cleveland**—City let contract ⅝-, 1-, 1½- and 2-in. water meters to Buffalo Meter Co., 2917 Main St., $40,080.

O., East Liverpool—City received low bids water-works plant; (a) steam piping, (b) ash conveyor, (c) damper regulator, (d) steam pipe covering, from Johns Danford Co., 70 Elliott St., Buffalo, (a) $10,990, (b) $3980, (c) $345 (d) $2759; Best Co., Pittsburgh, (a) $14,420, (b) $3592; Power Piping Co., (a) $15,500, (b) $3000. Noted June 21.

Ind., Kendalville—City received low bid for reservoir from Indiana Engr. Co., 702 Schoff Bldg., Ft. Wayne, $23,214.

★**Minn., Rochester**—See "Reinforced Concrete."

Neb., Unadilla—City received bids June 11 for water system from Katz Constr. Co., 638 Brandeis Bldg., Omaha, $10,194; Intermountain Constr. Co., Tecumseh, $15,552. Noted June 7.

★**N. D., Anamoose**—See "Sewers."

★**Mont., Livingston**—City let contract water system as follows: Pittsburgh Filter Co., Farmers Bank Bldg., Pittsburgh, general construction, $53,500, filter equipment, $29,800; McLaughlin & O'Neil, pipe distributing system, $26,693; Merkle Heinz Machinery Co., 508 Interstate Bldg., Kansas City, Mo., pumping machinery, $6755, hydrants and valves, $7326; American Cast Iron Pipe Co., 1 Bway., New York City, c.i. pipe, $85,445.

★**Que., St. Johns**—City let contract building filter, water tank and replacing several mains at water-works to Laurin & Leitch, 5 Beaver Hall Sq., Montreal, $195,975.

SEWERS

Proposed Work

Mass., Fitchburg—City soon lets contract installing one unit Starr sewage disposal system. About $25,000.

Mass., Leomister—City having plans prepared by Green Starr Eng. Co., 16th and Chestnut Sts., sewage disposal plant. About $15,000.

R. I., Providence—City passed resolution to issue $100,000 bonds to install sewers. M. H. Brondson, city engr.

N. Y., Schenectady—Council appropriated $40,000 to install sewers in various streets, including Rugby Rd. and Eastern Ave. T. Wooley, city engr.

N. J., South Orange—Village will sell $35,000 bonds July 16 for sewer improvements; $19,000 for water-works improvement; $12,000 street improvement; $23,000 for eliminating grade crossing. F. Fenner, village treas.

N. J., Trenton—City plans to install sewers Cain, Louis and Centennial Aves., Trent St., Greeley and Peake Alley. L. D. Hirsch, clk.

Ga., Atlanta—City plans improvements to sewerage system. About $22,000. H. N. Hurt, city engr.

O., Cincinnati—City plans sewer in California Ave., also paving portion of Central Ave. F. Krug, city engr.

O., Cincinnati—City will issue $800,000 bonds for acquiring easements for sewers through properties. F. Krug, city engr.

O., Cleveland Heights—(Warrensville P. O.)—Village to sell $10,000 bonds July 16 to install sewers. H. H. Canfield, clk.

O., Dover—City plans sanitary sewer on west side of North Wooster Ave. E. Arnold, city engr.

O., Marion—City plans constructing sanitary and storm sewer in portion of Spencer St. H. H. Noyes, city engr.

O., Newark—City plans sewer in portion of Arlington Ave. C. H. Wells, city engr.

O., Toledo—City plans storm sewer neighborhood Stickney Ave., Mulberry St. and section beyond Forest Cemetery to relieve flood conditions. About $150,000. W. Harmon, city sanitary expert.

Mich., Escanaba—City having plans prepared for 2 mi. concrete sewer. M. J. Hodson, city engr.

Ill., Rock Island—City had plans prepared 2 sewers in portions of 9th, 11th and 18th Sts. and 15th Ave. About $10,645. W. Treichler, city engr.

Wis., Milwaukee—City will issue $400,000 bonds to install for sewerage system. G. Stall, city engr.

Ia., Primghar—City plans installing sewerage system and paving streets. About $100,000. Address City Clk.

Minn., Caledonia—Village soon lets contract for sewerage system. O. Merlo, clk. J. F. Druar, 312 Commercial Bldg., St. Paul, engr. Noted May 24.

Minn., Cojato—City plans to install complete sewerage system. G. A. Stenson, clk.

Minn., Fairmont—City plans addition to sanitary sewerage system. About $60,000. A. Jones, city engr.

Minn., St. Paul—City had plans prepared for sewers in portions of James, Sydney, Sixth and other streets. O. Clausen, city engr.

Minn., Waseca—City election July 16 to vote on $25,000 bonds for constructing sewers. J. Madigan, city clk

Kan., Hutchinson—City plans 32-in. drain to care for storm waters of northwestern part of city. About $30,000. G. L. McLane, city engr.

N. D., Dickinson—See "Water-Works."

Mo., East Alton—City plans extending water-works and sewerage systems. Address City Clk.

Tex., Lampasas—City plans to install sewerage system. Address City Clk.

Okla., Commerce—City voted $[illegible] bonds for sewerage system. Benham Engr. Co., Colcord Bldg., Oklahoma, engrs. Noted June 7.

Okla., Oklahoma—City plans to install activated sludge plant for treating sewage. About $70,000. G. V. McClure, city engr.

Okla., Okmulgee—City election soon to vote on $145,000 bonds for sewer improvements. Benham Engineering Co., Colcord Bldg., Oklahoma, engrs. Noted Apr. 17.

Okla., Sentinel—City election soon to vote on $15,000 bonds for improving sewerage and light systems. W. B. Rollins & Co., 209 Ry. Ex. Bldg., Kansas City, Mo., engrs.

N. M., Las Vegas—City soon receives bids storm sewer and paving on 7th Ave. Address City Clk.

Idaho, Moscow—City plans to construct pipe line to locate sewerage-disposal plant. A. Smith, city engr., estimates cost between $7300 and $21,500.

Idaho, Pocatello—City plans sewers in Lateral Sewer Dist. No. 12. About $25,250. A. R. Dawson, city clk.

Utah, Salt Lake City—(Official)—City defeated $176,000 bonds to install storm sewers; $100,000 to build bridges; $316,000 to improve streets; $808,500 to improve, extend and enlarge water system; $200,000 to improve parks and build bath house. S. Q. Cannon, city engr. Noted June 14.

Ariz., Jerome—City will soon sell $40,000 bonds for sewers. Olmstead & Gillelen Hollingsworth Bldg., Los Angeles, engrs.

Wash., Seattle—See "Streets and Roads."

Wash., Seattle—City having plans prepared for sewerage system and purification plant. About $1,025,000. A. H. Dimock, city engr.

Ore., Pendleton—City to sell $20,000 bonds for constructing septic tank. Address City Clk.

N. B., Edmunston—See "Water-Works."

Ont., Toronto—City plans to install sewers portion Don Esplanada, west side. About $20,500. W. A. Littlejohn, city clk.

Ont., Toronto—City plans sewers in Landsowne Ave. About $36,670. R. Harris, wks. comr.

BIDS DESIRED

N. J., Camden—Until July 16 by Council for sewers in Carman and Lewis Sts., and retopping sewer on Federal St. F. S. Vanhart, chn. st. comn. Noted June 21.

Pa., Phila.—Until July 18, by G. E. Datesman, dir. pub. ser., for further work on northeast sewage treatment plant, O and Lycoming Sts.

Md., Hagerstown—Until Aug. 1, by Sewerage Comn., for sewers in southeast section. About $100,000. J. B. Ferguson, 43 North Jonathan St., engr.

O., Cleveland—Until July 19, by City, for installing sewers in portions of East 116th, East 171st and Corlett Sts. R. Hoffman, city engr.

O., Hamilton—(Official)—Until July 17, by Dept. Pub. Ser., for furnishing following materials: About 47,500 ft. of from ⅜- to 4-in. standard black pipe; 500 curb boxes; 1400 gas cocks; 600 1- to 1¼-in. black long screws and 400 1¼ x 1-in. black beaded ells. H. R. Garver, dir.

O., Toledo—See "Streets and Roads."

Ill., Grayville—See "Streets and Roads."

Ia., Davenport—Until July 17, by Sewer Com., for sewer drains in Rock Island Dist., Valley and other streets. About $100,000. A. R. Boudinot, city engr. Noted June 7.

Min., Atwater—Until Aug. 1 by Village for installing sewerage system involving 24,000 ft. of from 8- to 15-in. pipe. C. A. Swenson, clk.

Sewers (Continued)

Minn., Crosby—Until July 24, by City, for installing sanitary trunk sewer and lateral sewers. H. L. Nicholson, clk. C. S. Scheuer, engr.

Minn., Glenwood—Until July 31, by A. Irens, city clk., for sewer in Franklin St., and 9000 ft. in branches.

Ont., Toronto—Until July 17, by T. L. Church, chn. bd. control, for sewers in portions of Younge St., Rosedale Creek, and Lawton Ave.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., New York—City let contract tunnel relief sewer and appurtenances in portion of West 46th St. to Melrose Constr. Co., 147 East 125th St., $83,630.

★N. J., Cliffside Park—City let contract lateral sewers in several streets to Bergen Contr. Co. About $15,665.

★La., New Iberia—City let contract sewerage system to Hamilton Constr. Co., Shreveport. About $95,000. Noted May 17.

★Tenn., Fayetteville—See "Streets and Roads."

★O., Dayton—City let contract Vernon Pl. storm sewer to W. S. Kerchner & Son, $24,400.

★Mich., Muskegon Heights—(Official)—City let contract screen house, 2 sedimentation tanks, sludge drainage bed, etc., to G. B. Clark, Ludington, $590,000.

★Ill., Warsaw—(Official)—City let contract installing sanitary sewers, etc., to Harness Bros., Ottumwa, Ia., $21,336. Noted June 21.

★Ill., West Frankfort—(Official)—City let contract sewerage system to Craine Bros., Murphysboro, $81,933.

★Ia., Sioux City—City let contract West Morningside sewer, about 6 mi. long, to Cady & Savonell, $30,000.

★Minn., Virginia—City let contract installing tile storm sewers, Rooney's addition to C. Christopherson, 512 2nd St., $11,000.

★Tex., Port Arthur—City let contract sewers and pumping station to Caldwell Constr. Co., Texarkana, $70,097. Noted Apr. 12.

★Okla., Oklahoma City—City let contract sewers to Burkham Constr. Co., St. Louis. About $183,343. Noted Apr. 19.

★Cal., Daly City—See "Streets and Roads."

★Cal., Los Angeles—City let contract sewage disposal plant at County Farm, to M. Matic, $10,070.

★B. C., Trail—City let contract sewerage system to J. A. Broley & Co., Fernie, $24,650. Noted May 31.

STRUCTURAL STEEL WORK

Proposed Work

N. J., Ocean City—City plans bridge over Great Egg Harbor Bay from Beesley's Point to Somers Point. A. Champaion, mayor.

N. C., Charlotte—County sold $100,000 bonds to build bridges.

Wis., Prairie du Chien—(Official)—Prairie du Chien & Wyalusing Bridge Co. retained J. H. A. Brahtz, engr., St. Paul and Mankato, Minn., to prepare plans 700-ft. toll highway bridge over Wisconsin River. Noted May 31.

Minn., Virginia—Duluth, Missak & Northern Ry. plans to construct viaduct over Gilbert Rd. to carry street traffic. About $100,000. H. L. Dresser, Duluth, ch. engr.

Kan., Topeka—City having plans prepared rebuilding Kansas Ave. Bridge over Soldier Creek, 140 ft. long. About $25,000. A. R. Young, city engr.

Kan., Topeka—Missouri Pacific R.R. plans bridge over Kaw River; present bridge to be removed and new steel truss span 250 ft. long to replace same. E. A. Hadley, 1 Ry. Exchange Bldg., St. Louis, Mo., ch. engr.

Mont., Lewiston—Great Northern Ry. plans 1600-ft. bridge over Musselshell River. A. H. Hogeland, 4th and Jackson Sts., St. Paul, ch. engr.

Mo., Moberly—City, Wabash and Missouri, Kansas & Texas Railroads will build viaduct over Robins St. About $44,700, city to pay $11,695, Wabash, $18,246 and Missouri, Kansas & Texas, $14,759. L. F. Lonnbladh, Dallas, ch. engr. latter road.

Okla., New Castle—Oklahoma City-New Castle Bridge Co., incorporated with $150,000 capital stock, will build bridge over South Canadian River between Oklahoma and Grady Cos. C. A. Schweinle, F. Thompson and M. D. Scott, Oklahoma, incorporators. Noted June 21.

Okla., Poteau—See "Streets and Roads."

Utah, Salt Lake City—See "Sewers."

Utah, Salt Lake City—(Official)—Citizens defeated bonds to build bridge over Jordan River at 4th S. and 5th S. Sts. and surplus canal at Redwood Rd. About $22,500. S. Q. Cannon, city engr. Noted June 14.

Ont., Markham—County plans 80- to 100-ft. bridge over stream on Locust Hill. E. A. James, Excelsior Life Bldg., Toronto, comr.

Ont., Toronto—Toronto-Hamilton Highway Comn. plans bridge over Etobicoke Creek, York Co. About $13,270. H. S. Van Scoyoc, Toronto, engr.

BIDS DESIRED

N. Y., New York—Until July 30, by M. M. Marks, boro. pres., building Park Ave. viaduct from 40th St. to Grand Central Station.

W. Va., Hamlin—Until Aug. 16, by County, building bridges over 2-Mile Creek and Upper 2-Mile Creek at West Hamlin; also 4 small bridges and culverts. J. M. Oliver, Huntington, engr.

O., Warren—(Official)—Until July 25, by Bd. Co. Comrs., for Huston Bridge on Rd. No. 101, Sect. "A," Newton Twp. M. H. Evans, clk. Noted June 21.

Ind., Brazil—Until Aug. 14, by Co. Comrs., for Brunswick Bridge over Eel River. About $35,000. A. Graeser, co. audr. Noted July 5.

Ill., Quincy—Until July 17, by Co. Comrs., for 12 bridges.

Mont., Virginia City—Until July 19 by State Highway Comn., for 1 130-ft. span combination highway bridge across Saline Spring Creek and 1 65-ft. combination highway bridge across Odell Creek, Madison Co. D. A. Noble, co. clk. C. C. Adams, co. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—Metropolitan Park Comn. received low bids building bridge over Neponsit River between Boston and Quincy, from Bay State Dredging and Constr. Co., 247 Atlantic Ave., $360,000; Holbrook, Cabot & Rollins, 6 Beacon St., $381,074; Hugh Nawn Contr. Co., 82 Saven St., $427,000. Noted June 28.

★O., Columbus—(Official)—City let contract extension to Rich St. bridge to Capitol Constr. Co., Ruggery Bldg., $89,000. Noted June 28.

★Wis., Superior—Co. let contract installing culverts and grading on South Superior and Olive Rd. to M. Peterson, 1201 13th St., about $18,772. Noted June 14.

★Ia., Eldora—County let contract 2 bridges to Welden Constr. Co., about $14,114.

★Wash., Montesano—Co. Comrs. let contract 200-ft. span over Chehalis River to Tweeden & Mills, California Bldg., Tacoma, $12,587.

★Wash., Seattle—Co. Comrs. let contract 180-ft. steel bridge with 125-ft. approach to Monson Constr. Co., Portland, $34,829 Noted June 21.

REINFORCED CONCRETE

Proposed Work

Pa., Ardmore—Autocar Co. having plans prepared for 5-story rein.-con. and steel addition to plant here.

Pa., Phila.—De Long Hook & Eye Co. having plans prepared for 4-story, 80x250-ft. rein.-con. plant on 21st St. W. Steele & Sons Co., 1600 Arch St., archts.

Ala., Montgomery—Louisville & Nashville R.R. plans rein.-con. bridge on Bell St. About $20,000. W. H. Courtenay, Louisville, engr.

Ill., Chicago—Ohio Match Co., 35 North Dearborn St., plans 8-story, rein.-con. sprinkler building on Ohio St. Cost between $200,000 and $250,000.

Minn., Rochester—(Official)—City retained J. H. A. Brahtz, engr., Mankato, to prepare plans for concrete bridges.

Kan., Independence—Atchison, Topeka & Santa Fe Ry. (Eastern Lines) soon receives bids for rein.-con. viaduct. About $15,000. R. A. Rutledge, Topeka, ch. engr.

Neb., Omaha—Waterloo Creamery Co., 16th and Pierce Sts., soon lets contract 2-story, 50x140-ft., rein.-con. and steel creamery here. About $225,000. C. A. Berger, 811 Sykes Bldg., Minneapolis, archt.

Mont., Butte—City plans to build concrete sewage-disposal plant. W. C. Matthews, city engr.

Ark., Little Rock—Bd. Comrs. will build rein.-con. bridge over Arkansas River a site of present free bridge. About $450,000 M. Wright, chn. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo.

Wash., Bellingham—Council plans new concrete bridge over Whatsom Creek at Dupont and Prospect Sts. About $11,000. C. Lindberg, city engr.

Ore., Portland—City and Oregon-Washington R.R. & Navigation Co. plan rein.-con. viaduct over tracks on East 33rd St. P. H. Dater, city engr. S. Murray, Portland, ch. engr. R.R.

Cal., Oceanside—Bd. Superv. will build concrete bridge over Santa Margarita River on state highway north Oceanside. About $40,000.

Ont., Weston—City having plans prepared by James, Loudon & Hertzberg, engrs., for rein.-con. intake crib, concrete dividing wall sedimentation basin and lining basin with concrete. J. H. Taylor, supt.

BIDS DESIRED

N. J., Somerville—Until July 27, by Bd. Freeholders, for concrete arch bridge on Chimney Rd. J. Dougherty, co. engr.

Pa., Phila.—(Official)—Until July 24, by W. S. Twining, dir. pub. serv., for Contract No. 526, concrete track floor, c.i. floor drains and rein.-con. slab footwalks from Callowhill St. to Indiana St., involving 15,630 lin.ft. structure, Contract No. 527, concrete track floor c.i. floor drains and rein.-con. slab footwalks from Indiana to Dyre Sts., involving 15,000 lin.ft. structure, Contract No. 528, alternate proposal, grouping Contracts Nos. 526 and 527. W. S. Twining, dir.

Pa., Sunbury—(Official)—Until July 30, by A. Raker, co. controller, building 2000-ft. rein.-con. inter-county bridge over Susquehanna River between Watsontown, Northcumberland Co. and White Deer. Union Co Adv. in this issue.

Pa., Uniontown—Until Aug. 3, by H. Kisinger, co. controller, building rein.-con. bridge over Georges Creek, Fairchance Boro. and over Meadow Run, Ohiopyle Boro.

W. Va., Fairmont—Until July 20, by Bd. Affairs, building rein.-con. bridge over Coal Run. A. J. Kern, clk. Concrete-Steel Eng. Co., Park Row Bldg., New York City, engrs. Adv. in this issue.

Miss., Greenville—(Official)—Until Aug. 6, by Bd. Superv., for rein.-con. bridge over Granicus Bayou. Bids opened July 2 for steel structure rejected. J. S. Allen, co. engr. Noted June 21.

Ind., Marion—Until July 19, by Co. Comrs., for rein.-con. bridge over Mississinwa River. M. McRae, aud.

Ind., Sullivan—Until July 28, by Co. Comrs., for 5 rein.-con. bridges. F. M. Daniels, aud.

Ill., Danville—(Official)—Until July 17, by County building rein.-con. arch bridge, Sect. 6, Georgetown Twp. W. S. Dillon, co. supt. highways.

Ia., Waverly—See "Water-Works."

Minn., Owatonna—Until July 17, by County building rein.-con. state bridge No. 2703, 50-ft. span 18-ft. roadway. M. J. Parcher, aud.

Wash., Colfax—Until July 16, by Co. Comrs., building 2 span rein.-con. arch bridge over Union Flat Creek, near La Crosse. J. M. McCaw, co. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn—(Official)—Sperry Gyroscope Co., Manhattan Bridge Plaza, let contract 11-story, 100 x 100-ft. rein.-con. factory, to Turner Constr. Co., 244 Madison Ave., New York City.

★N. Y., Schoharie—(Official)—Town let contract rein.-con. arch bridge over Fox Creek to Fallkill Constr. Co., $13,650. Noted June 7.

★Pa., Phila.—Midvale Steel Co., c/o F. C. Yeates, purch. agt., Widener Bldg., let contract rein.-con. reservoir to Concrete Constr. Co., 1618 Thompson St., $15,000.

★O., Cleveland—Erie Dock Co., West 25th St., let contract steel and concrete shop buildings to King-Griffin Constr. Co., Engrs. Bldg., $50,000. Noted May 10.

Ind., Bedford—County received low bid concrete bridge from H. J. Dobson, Bedford, $20,300.

Reinforced Concrete (Continued)

★Minn., Minneapolis—N. B. La Blond, Security Bldg., let contract 4-story, 100x 150-ft. rein.-con. warehouse, 241-251 1st Ave., N., to J. Leck & Co., 316 South 7th St. About $50,000.

★Minn., Rochester—City let contract concrete dam 60 ft. high and 1200-acre reservoir, to Omaha Bridge & Steel Structural Co., of Nebraska. About $650,000.

★Tex., El Paso—Y. M. C. A. let contract 3-story 70x90-ft. rein.-con. building to McGregor & Henger. About $70,000.

★Tex., Galveston—Bd. Co. Comrs. and railroads entering Galveston let contract reconstructing damaged portion of Galveston Causeway to Larkin & Sangster, Inc., Morgan Bldg., Buffalo. Cost about $1,725,000 which will be borne by county and railway companies. Work involves 2 concrete arch bridge extensions to be built at both ends of present structure. On mainland end there will be 28 new arches, on Island of Galveston end 51 arches making total of 72 arches each having span of 60 ft.

Ont., Toronto—Swift Canadian Co. let contract rein.-con. packing and cooling plant to Archibald & Holmes, Excelsior Life Bldg. About $125,000.

STREETS AND ROADS

Proposed Work

N. C., Asheville—Co. Comrs. and State Highway Comrs. passed resolution to build highway from Asheville to Knoxville.

N. Y., Syracuse—Bd. Superv. plans paving Watervale Rd., Pompey Twp.; also road improvements in Dewitt and Manlius Twps. H. A. Allen, co. engr.

N. Y., Syracuse—City plans to resurface portion South Ave. H. A. Allen, city engr.

N. J., Bayonne—City plans paving Prospect Ave. and West 39th St., asphalt. W. P. Lee, city clk., W. L. Clarkson, engr.

N. J., Cape May—Bd. Freeholders plans to rebuild 3400-mi. seashore road, bituminous concrete surface and 40,000 sq.yd. foundation. F. W. Fowkes, clk.

N. J., Jersey City—Bd. Freeholders soon receives bids improving portion Newark and Bergen Turnpikes, concrete base. W. J. Wasser, co. engr. Noted May 4.

N. J., Jersey City—Bd. Comrs. received no bids paving Germania Ave., Belgian block. G. A. Van Keuren, city engr. Noted June 28.

N. J., Jersey City—City received no bids improving Tonnell Ave., wood block. Will readvertise. C. A. Van Keuren, city engr.

N. J., Newark—Bd. Pub. Wks. approved paving Clinton Ave., granite block and asphalt, 6-in. concrete foundation; portion South 16th St., 10-in. telford. M. R. Sherrard, city engr.

N. J., Newark—Bd. Freeholders to sell $600,000 bonds July 24 to build and rebuild 9 highways and widen pavements. W. Cardwell, chn. Noted May 24.

N. J., Paterson—Bd. Freeholders plans to sell $251,000 bonds to improve roads. G. W. Botbyl, clk.

N. J., Paterson—City plans pave portion Dale Ave., granite block. H. J. Hardes, city engr.

N. J., Paterson—Bd. Works plans paving Lake, Godwin, Madison, Doremus, Temple, North 40th and Lyons Sts. and Belmont and Burhans Aves. H. J. Hardes, city engr. Noted June 28.

N. J., South Orange—See "Sewers."

N. J., White House Station—Bd. Freeholders plan to improve road from Whitehouse Sta. to Lebanon, amiesite.

Pa., Carbondale—(Official)—City sold $55,000 bonds to improve streets. H. G. Likely, clk.

Pa., Dubois—City plans to repave North Brady St., 6-in. course of concrete, 1-in. sand cushion and vitr. brick. J. Tulford, city engr.

Pa., Pittsburgh—Council passed ordinance to pave, grade and curb portions Chartiers and Upland Aves. About $60,000 and $14,000 respectively. R. Swann, city engr.

Va., Hampton—Co. Comrs. issued $50,000 bonds to improve roads. H. H. Holt, clk.

Va., Martinsburg—Bd. Supervs. plan to build highway from point on Smith River to Axton.

W. Va., Elmgrove—City plans election to vote on $32,000 bond issue for improving streets.

N. C., Salisbury—City sold $75,000 bonds to pave streets. W. H. Woodson, mayor.

Ga., Alma—County voted $60,000 bonds to build roads.

Fla., Dade City—County voted $10,000 bonds to build Natl. Highway in Special Rd. Dist. No. 4.

Fla., Ft. Pierce—County voted $80,000 bonds to build roads in Fellsmere Rd. Dist.

Fla., Kissimmee—County voted $100,000 bonds to build road from Kissimmee to Loughman, Dists. Nos. 1 and 2. Noted May 24.

Fla., Perry—City voted $75,000 bonds to pave streets.

Miss., Biloxi—City plans to spend between $30,000 to $40,000 to pave streets. J. V. Hagan, city engr.

Miss., Hernando—County voted $75,000 bonds to build link in Yazoo Delta Highway.

Miss., Vicksburg—City plans to lay concrete sidewalks on Main, 1st N, Washington, Farmer, Catherine, Dabney and Drummond Sts. C. R. Tuis, city enrg.

La., Edgard—County to sell $180,000 bonds, July 19, to build roads. W. Lasseigne, clk. Noted June 28.

Tenn., Knoxville—City Comrs. authorized $800,000 bond issue to improve streets. J. B. McCalls, city engr.

Tenn., Springfield—County voted $150,000 bonds to build roads. Noted May 24.

O., Bryan—City plans improving portions of Butler and Portland Sts. J. A. Neil, clk.

O., Canton—City plans to repave portion South Erie Ave. About $10,000. W. E. Sarver, city engr.

O., Cincinnati—Co. Comrs. plan to improve Clough Pike from Batavia Pike to Bogart Rd., concrete. About $30,300.

O., Cincinnati—See "Sewers."

O., Cleveland—City plans to issue $280,000 bonds to improve portion Clifton and Crawford Rds. Hough, Madison and St. Clair Aves., East 55th, East 71st, West 25th and other streets. R. Hoffman, city engr.

O., Columbus—City voted $25,000 bond issue for improving streets. Noted June 21.

O., Dayton—City approved plans for paving Norwood Ave. F. O. Eichelberger, city engr.

O., Lakewood—City to sell $24,760 bonds, July 23, to improve portion Merle and Jackson Sts. E. A. Fisher, city engr.

O., Massillon—City plans to pave portion South Erie St. H. McYost, city engr. About $10,000.

O., Port Clinton—County to sell $104,000 bonds. July 23, for constructing roads.

O., Ravenna—County to sell $30,000 bonds, July 30, for improving I. C. H. No. 18, Edinburg Twp. M. J. Kelley, co. aud.

O., Willoughby—County to sell $36,000 bonds, July 21, to improve portion Lost Nation-Plains Rd., Willoughby Twp. C. C. Jenkins, clk.

Ind., Gary—City plans to pave 10 mi. of 5th Ave., concrete. W. J. Fulton, city engr.

Ind., Greenfield—(Official)—County soon receives bids building Alonzo Tyner et al. Rd., sand cushion brick. About $68,000.

Ind., Wabash—County sold $10,000 bonds to improve roads.

Mich., Lansing—City voted to issue $75,500 bonds to pave streets. E. Eddy, city engr.

Ill., Belleville—County soon lets contract improving roads. About $400,000. D. O. Thomas, supt. highways.

Ill., Springfield—City plans repaving Monroe St. W. D Seeley, city engr.

Wis., Green Bay—City plans asphalt pavement on portion South Bway. and rein.-con. pavement in 10th St. to approaches to Mason St. Bridge. F. A. Torkelson, engr.

Wis., Superior—City plans paving with concrete portions of Brick Ave. E. B. Banks, city engr.

Ia., Manchester—County plans 15-mi. gravel road. About $75,000.

Ia., Primghar—See "Sewers."

Arkansas—State Highway Comn., Little Rock, plans concrete roads with asphalt surface to Ft. Roots and new army cantonment. About $125,000.

Ark., Heber Springs—County plans 16-mi. highway. About $48,000.

Ark., Pine Bluff—County plans to extend Dollarway Pike now running from Pine Bluff to Pulaski into Little Rock, about 27 mi. H. I. Engtrom, co. engr. Lund & Hill, 527 Southern Trust Bldg., cons. engrs.

Tex., Angleton—Attorney General approved $20,000 bond issue to build roads in Brazoria Co., Rd. Dist. No. 10.

Tex., Houston Heights—City election July 28 to vote on $150,000 bonds to pave streets. C. E. Butzer, clk.

Tex., Linden—County voted $40,000 bonds to build roads.

Tex., Pittsburg—County voted $30,000 bonds to build roads in Nales and Omaha Rd. Dists.

Tex., Vernon—City plans to pave portion West Wilbarger, West Paradise, South Main, East Wilbarger, West Pease, West and East Texas and other streets. About $80,000.

Okla., Ada—County election July 21 to vote on $650,000 bonds to build hard surfaced roads. I. R. Gilmore, comr. Noted May 10.

Okla., Hewitt—Town voted $70,000 bonds to improve and build roads. Noted June 7.

Okla., Poteau—County voted $30,000 bonds to build roads and bridges in Heavener Twp.

Okla., Sayre—County voted $15,000 bonds to build roads, Rd. Dist. No. 3.

Okla., Tishomingo—Co. Comrs. adopted resolution to issue $28,500 bonds to build roads in Garrett Twp., and $14,000 for Hains Twp.

Okla., Wellston—County voted $16,000 bonds to build roads.

Idaho, Grangeville—Grangeville Highway Dist. voted $35,000 bonds to build roads. Noted June 21.

Utah, Logan—City plans to pave portion Main St. About $64,000. State to appropriate $15,000 toward cost.

Utah, Ogden—City had plans prepared for paving South Washington Ave. About $35,000. J. M. Tracey, city engr.

Wash., Seattle—County had plans prepared paving 5 mi. permanent Highway No. 11-B from Auburn to Enumclaw., 1 course concrete, 20-ft. wide. S. Humes, co. engr.

Wash., Seattle—Bd. Pub. Wks. approved plans to pave and install sewers in 43rd Ave. N. E. A. H. Dimack, city engr.

Wash., Seattle—City had plans prepared for paving 15th Ave. N. W. bridge approach, asphaltic concrete. A. H. Dimock, city engr.

Ore., Salem—State Highway Comn. has authorized road work in Oregon to amount of $1,073,000. The commission has available for appropriation this year $1,866,000; of this, $1,000,000 is available from $6,000,000 bond issue. The Government has approved of all commission's applications for forest road money expenditures. The sum of $880,000 was appropriated by commission for Pacific and Columbia River Highways. Appropriations made were: Pacific Highway, Douglas and Josephine Cos., $380,000; Columbia River Highway, The Dalles to Astoria, grading, $500,000; Ft. Rock to Lakeview, $15,000; Bend to La Pine $17,000; Sherman Co., macadamizing, $15,000; Wasco Co., graveling $10,000; Wasco Co.'s money to match forest fund, $135,000.

On Pacific Highway, the money to be used consists of $75,000 from Government, $75,000 from State, and $200,000 of Douglas Co. bond money, to be expended under direction of commission; with $25,000 alloted for next year. For Columbia River Highway, the Commission set aside $500,000, to take care of grading from The Dalles to Astoria. It is expected that the hard surface mileage allowed will be completed this year, owing to weather conditions. It will be a month before bids can be advertised for and contracts let.

Cal., Lemoore—City rejected bids improving streets and installing electrolier lighting system. New Bids. About $140,000.

Cal., Los Angeles—Council adopted ordinance to improve Wall and Soto Sts. H. Hamlin, city engr.

Cal., Tulare—Council passed resolution to pave 3½ mi. streets. About $35,000. G. F. Leckner, clk. Noted Apr. 26.

Ont., Amherstburg—Town soon receives bids paving Apsley and Sandwich Sts., rein.-con. A. Newman, Fleming Blk., Windsor, engr.

Ont., Aylmer—Town plans to lay cement sidewalks on Warren St. D. A. Davis, clk.

Streets and Roads (Continued)

Ont., New Hamburg—Council plans to pave streets, concrete. About $16,000. H. C. Edgar, clk.

B. C., Victoria—Council plans to resurface and grade Oak Bay Ave. About $30,000.

BIDS DESIRED

N. J., Elizabeth—Until July 16, by County, repairing portion Terrill Rd., involving 1248 tons bituminous concrete, 306 lin.ft. trench underdrain, grading 9359 lin.ft. gutter and shoulders. J. L. Bauer, co. engr.

N. J., Hightstown—Until July 14, by Boro. Council, for laying 1500 lin.ft. cement curb and 6000-ft. gutter. J. W. Perrine, clk.

N. J., Jersey City—Until July 17, by City Comrs. paving portion Hopkins Ave., belgian block, Siedler St., asphalt. About $30,000. C. A. Van Keuren, city engr.

N. J., Princeton—Until July 17, by Boro. Council, rebuilding 11,273 sq.yd. Stockton St., warrenite surface, 6-in. concrete foundation. V. B. Cook, clk.

N. J., Somerville—Until July 27, by Bd. Freeholders, improving 2.838 mi. Belle Mead-Griggstown Rd., macadam. J. Dougherty, engr.

N. J., Union—Until July 16, by Bd. Council, paving New York Ave., block, new bluestone curb also repaving Gardner St., bituminous concrete, 5-in. concrete foundation. About $30,000. E. Bautz, clk.

N. J., West Orange—Until July 17, by Town Council, grading and paving Amos St., asphalt. G. W. Foster, clk.

N. J., Westfield—Until July 16, by Town Council for improving New York Ave., 2600 lin.ft. concrete curb, 5200 sq.yd. 6-in. macadam; culverts and sewer inlets. C. Clark, clk.

Pennsylvania—Until July 24 by State Highway Comn., Harrisburg, paving 9300 lin.ft. road, Moon and Hopewell Twps., vitr. block and waterbound macadam; grading and draining 20,109 ft. road Summit Twp., completing 9,299 lin.ft. Monaca-Aliquippa Rd., vitr. block and waterbound macadam. F. H. Black, state highway engr.

Pa., Pottstown—(Official)—Until July 24, by City Council paving portion North and South Centre St., wood block, vitr. brick or concrete. J. H. Strauch, city engr., advertised in this issue.

Md., Baltimore—(Official)—Until July 17, by State Rds. Comn., 601 Garrett Bldg., building section state highway. F. A. Zouck, chn.; advertised in this issue.

Md., Hagerstown—(Official)—Until July 21 by Sewerage Comn., installing mains and lateral sewers various streets. E. E. Heard, secy.; advertised in this issue.

Va., Richmond—Until July 14, by State Highway Dept., for reconstructing gravel road, about 1½ mi. long. G. P. Coleman, comr.

W. Va., Hamlin—Until Aug. 16, by A. F. Black, co. clk., for 6 mi. of roads. Noted June 7.

W. Va., Williamson—Until Aug. 4 by County building and improving 35 mi. earth road. E. Boggs, clk. Noted May 24.

S. C., McCormick—(Official)—Until July 19, by Co. Comn., grading and building drainage structures on 70 mi. highways. J. J. Dorn, chn. M. E. Worrell, co. highway engr.

Ky., Henderson—(Official)—Until July 17, by J. G. Adams, clk., concrete curb and gutter on portions of Alves, Madison, Dixon and 2nd Sts.

O., Ashland—Until July 26, by City, for improving and paving portions of Virginia Ave. R. R. Conn, city engr. Noted June 7.

O., Cincinnati—Until July 20 by County improving portion Cin-Hamilton I. C. H. No. 39, Springfield Twp., under Spec. No. 1057. F. E. Wesselman, clk.

O., Medina—(Official)—Until July 14, by Council, for improving West Main St., 3-in. bituminous macadam. F. C. Randall, engr.

O., Springfield—Until July 16, by C. E. Ashburger, city mgr., improving and paving portion Sherman St.

O., Toledo—Until July 17, by City, improving and paving portions of 19 different streets; constructing sewer in Main Sewer Dist. No. 23. D. H. Goodwillie, dir. pub. serv.

O., Zanesville—Until July 18, by Co. Comrs. paving 10 mi. Adamson Rd. Improv. from end of State-Aid improvement to south corporation line of Adamsville. F. C. Werner, clk.

Indiana—By Co. Comrs. for building roads as follows:
July 23: Terra Houte; road, Harrison Twp. T. Ferguson, aud.
July 25: Warsaw; gravel road, Plain Twp. V. D. Mock(aud.
Aug. 7: Salem; road in Posey and Washington and Madison Twps. E. E. Batt, aud.

Ill., Grayville—(Official)—Until July 16, by P. R. Blood, engr., for 15,813 sq.yd. brick paving, 25,483 sq.yd. tar macadam paving, 30,107 ft. curb and gutter and 7918-ft. storm sewers.

Ia., Davenport—Until July 18, by Bd. Local Improv. paving portion of 2nd and other streets. About $50,000. R. E. Sawistowsky, city engr.

Ark., Pine Bluff—Until July 16, by Comrs. Rd. Improvement Dist. No. 21, building 5 mi. gravel road, bituminous carpet cover. W. T. Simpson, comr.

Tex., Victoria—Until July 16, by C. A. Wertheimer, city secy., for paving 8 streets, asphaltic concrete, bitulithic, sheet asphalt, Uvalde rock asphalt, vertical fiber brick, portland cement concrete and 2 course concrete pavement. J. A. Block, engr.

Wash., Seattle—Until July 17, by Co. Comrs., grading and graveling 2½-mi. permanent highway No. 2-F. About $50,000.

Wash., Spokane—Until July 29, by Co. Comrs., paving 2.65 mi. permanent highway No. 7-D, 1 course concrete, asphaltic concrete on cement concrete base, asphaltic concrete, bituminous base, warrenite, bituminous base. About $50,000.

Wash., Walla Walla—Until July 20, by Co. Comrs. building Permanent Highway No. 17. G. Cookerly, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Maine—(Official)—State Highway Comn., Augusta, received low bids (a) gravel surfacing 6.16 mi. road, Pittsfield Twp., (b) 6.05 mi. bituminous macadam road, Bowdoinham Sect., (c) gravel surfacing 1.06 mi. Edgecomb Twp., (d) gravel surfacing 2.85 mi. Newcastle Twp. from D. Susi, Pittsfield, (a) $49,484; Noyes & Campbell Co., 191 Water St., Augusta, (a) $64,372, (c) $9866, (d) $27,147; W. M. Fellows, Farmington, (a) $65,376; A. D. Bridges, Hazardville, Conn., (b) $90,686; H. A. Day, Bangor, (c) $8,297; J. Arborio, 36 Ward St., Hartford, (c) $10,111, (d) $25,602.

★**Mass., Boston**—City let contract paving Turner, Parkland, South, North Beacon, Brighton Sts., and Waldo Terrace to Coleman Bros., Pearl St., Chelsea, $75,063.

Mass., Dorchester—City received low bid paving Nevada St., and Wilmington Ave., sheet asphalt or bitulithic, from Central Constr. Co., 228 Southampton St., Roxbury, $10,785.

N. Y., Albany—(Official)—State Highway Comn., 55 Lancaster St., received bids improving highways in various counties as follows: Repair Contract No. 1130, Rd. No. 193, Albany Co., Kennedy Constr. Co., Albany, $40,908; Repair Contract No. 1112, Rd. No. 508, Albany Co., H. Miller, Albany, $34,266; Kennedy Contr. Co., Albany, $35,975; Repair Contract No. 1129, Rd. No. 5022, Broome Co., J. Walker, Albany, $33,362, Edgecomb Bros., Inc., Binghamton, $33,506; Repair Contract No. 1124, Rd. No. 126, Broome Co., J. Walker, Albany, $21,588, T. L. Ryan, Binghamton, $21,667, Edgecomb Bros., Inc., Binghamton, $22,230; Repair Contract No. 1126, Rd. No. 601, Cattaraugus Co., no proposals received; Repair Contract No. 1132, Rd. No. 698, Chautauqua Co., no proposals received; Repair Contract No. 1117, Rds. Nos. 5072 and 5073, Columbia Co., S. Beskin, Beacon, $54,424; Repair Contract No. 1120, Rd. No. 584, Erie Co., R. Hopkins, Troy, $24,740; Repair Contract No. 1046, Rd. No. 744, Essex Co., The Lane Construction Co., Meriden, Conn., $29,863, W. L. Lawton, Glens Falls, N. Y., $30,592; Repair Contract No. 1068, Rds. Nos. 460, 461, 463, 465, 466, 471, 830, 5466 and 5524, Herkimer Co., Pathfinder Constr. Co., Fulton, $20,649, Defiance Corp., Ticonderoga, $20,649, H. W. Fearl, Potsdam, $20,823, Newport Constr. Co., Herkimer, $21,120; Repair Contract No. 1090, Rd. No. 238, Jefferson Co., A. F. McConville, Ogdensburg, $29,100, T. O'Brien, Watertown, $31,945; Repair Contract No. 1125, Rd. No. 5302, Livingston Co., H. W. Roberts Co., Utica, $19,740; Repair Contract No. 1122, Rd. No. 9100, Livingston Co., Greenfield Constr. Co., Hornell, $9936, McCarthy & Wall, Mt. Morris, $10,021, F. T. Murray, Rochester, $10,200, Repair Contract No. 1121, Rd. No. 253, Monroe Co., Whitmore-Rauber & Vicinius, Rochester, $20,939, Ribstein-Holter Co., Rochester, $22,260, T. Holerhan, Rochester, $22,938; Repair Contract No. 1123, Rd. No. 5406, Oneida Co., Griffin & Griffin, Norwich, $1199, Repair Contract No. 1131, Road No. 438, Oneida Co., H. W. Roberts Co., Utica, $44,946, Repair Contract No. 1089, Rd. No. 5576, Ontario Co., P. H. Murray, Rochester, $40,896, Dale Engineering Co., Utica, $43,730, Repair Contract No. 1118, Rd. No. 65, Orange Co., Schunnemunk Cons. Co., Highland Mills, $35,015; Repair Contract No. 1128, Rd. No. 450, Oswego Co., Kennedy Cons. Co., Albany, $15,394.; Repair Contract No. 1045, Rd. No. 5205, Saratoga Co., R. Hopkins, Troy, $37,890; Repair Contract No. 1034, Rd. No. 5282, Seneca Co., D. W. Robbins, Inc., New York City, $9403, General Cross Stone Co., Easton, Pa., $9453, Pathfinder Constr. Co., Fulton, $9495, Kennedy Constr. Co., Albany, $10,220; Repair Contract No. 1133, Rd. No. 906, Steuben Co., Greenfield Constr. Co., Hornell, $24,582, Kennedy Constr. Co., Albany, $24,675; Repair Contract No. 1018, Rds. Nos. 85, 720, 720-A, 1080, 1224, Washington Co., H. W. Fearl, Potsdam, $3945, D. H. Noonan & Son, Saratoga Spgs., $4359; Broken Stone Contract No. 74, Highway No. 1038, Erie Co., W. K. Frank, Buffalo, $10,263, S. K. Johnson, Norwich, $10,863, C. E. Wells, Savannah, $10,890, R. Hopkins, Troy, $11,447, G. W. Moore, Buffalo, $11,551, G. C. Hill, Fulton, $11,677.

★**N. Y., Fredonia**—City let contract paving Orchard St. to Dunkirk Constr. Co., 112 Eagle St., Dunkirk.

★**N. Y., Niagara Falls**—City let contract paving portion 20th St., conneaut block, to Pub. Ser. Contr. Co., E. & H. Bldg., $32,080.

★**N. Y., Norwich**—City let contract paving 2900 ft. streets, concrete, to Paddleford & King, $11,423.

★**N. Y., Rochester**—Bd. Contract and Supply let contract laying sidewalks on Clinton Ave. to J. Petrossi Co., $9906; asphalt pavements Ethel St. and Woodbine Ave., Whitmore, Rauber & Vicinus, 279 South Ave., $4085 and $7517 respectively.

N. Y., Rochester—City received low bids paving Genesee Blvd. from Whitmore, Rauber & Vicinus, 279 South Ave., $104,406; Rochester Vulcanite Co., Exchange Pl. Bldg., $106,000; F. V. Brotsch Co., E. & B. Bldg., $112,000.

★**N. Y., Troy**—City let contract paving, grading and curbing portion Lake Ave. to J. Davitt, Troy, $18,000.

★**N. J., Camden**—Bd. Freeholders let contract resurfacing Browning Rd. from Marlton and Blackwood Pike to Manwaring & Cummings, 26 East Church Lane and J. E. Shanley Co., Commercial Trust Bldg., both of Phila. About $18,000. Noted May 31.

★**N. J., Lamington**—Bd. Freeholders, Somerville, let contract building road from Lamington to New Germantown, macadam, to M. I. Demarest, Sewaren.

★**N. J., Morristown**—Bd. Freeholders let contract rebuilding Madison Ave. to Gary Constr. Co., Morristown, $27,635. Noted June 28.

★**N. J., Newton**—County let contract paving Spring St., concrete, to Sothman Corp., Newton, $12,000.

★**N. J., Orange**—(Official)—Bd. Freeholders, Newark, let contract paving Central Ave., involving 26,000 sq.yd. "Hastings" asphalt blocks to Hastings Pavt. Co., 25 Broad St., New York City, $78,965.

★**N. J., Orange**—Town let contract improving Harvard Terrace, involving 2973 sq.yd. asphalt bound macadam, $1.06 per sq.yd., 7144 sq.ft. cement sidewalks, 17c., 1806 lin.ft. concrete curb, 58c., 4156 cu.yd. excavation, 84c., to J. F. Chapman, Newark.

★**N. J., Trenton**—City let contract laying sidewalks, curbs and 25,889 sq.yd. liquid asphalt paving to C. A. Reed & Co., 623 Monmouth St.

★**Pa., Cannonsburg**—Boro. let contract paving, grading and curbing Smithfield Ave. to Hardy & Rankin, $60,000.

★**Pa., Charleroi**—Boro. let contract paving, grading and curbing streets to Hastings & Piper, $11,076.

★**Pa., Dormont**—City let contract paving La Salle Ave., to D. Carpellicci, 130 Main St., Carrick.

★**Pa., Edwardsville**—City let contract paving Grove St., vitr. brick, to Bank Constr. Co., Bennett Bldg., Wilkes-Barre, $21,000.

Streets and Roads (Continued)

★Pa., Newport—(Official)—Town let contract paving 11,500 sq.yd. with "Hastings" asphalt blocks in villages of Alden, Wanamie and Glen Lyon to C. Rees, Nanticoke, $60,000.

★Pa., Parnassus—Boro. let contract paving 3800 sq.yd. brick, 2800 lin.ft. concrete curb and gutter, 600 lin.ft. concrete sidewalk to L. H. Hileman, New Kensington, $20,000.

★Pa., Phila.—City let contract building parkway from Broad to 16th St. and 1½ mi. extension to North East Blvd. to McNichol Paving and Constr. Co., 1923 Cherry St., $88,824 and $326,500 respectively.

★Pa., Phila.—City let contract paving Delaware Ave. to McNichol Paving & Contr. Co., 1923 Cherry St. About $194,000. Noted July 5.

★Pa., Pittsburgh—Co. Comn. let contract asphaltic-concrete and rein.-con. roads as follows: T. Cronin Co., South 17th St., Bellevue Rd., $44,703, Washington Pike No. 1, $21,744, Troy Hill Rd., $49,743; Columbus Asphalt Paving Co., Pittsburgh, Broughton and Cochrans Mills Rd., $23,350, Beaver Grade Rd., $55,744, Steubenville Pike extension, $52,467, Steubenville Pike and Enlow, Cliff mines, $36,790, Broughton and Library connecting Rd., $44,370, McKees Rocks Rd., $28,949, Booth & Flynn, 1942 Forbes St., Logans Ferry Rd., $27,843 Library Rd., $32,511, Library extension Rd., $118,137; Pittsburgh Amiesite Co., Jenkins Bldg., Lovedale Rd., $63,284; G. B. White Co., Jenkins Bldg., Long Run Rd., $57,525.

★W. Va., Fairmont—County let contract 23 mi. paving to Flood & Vanwert, Hudson Falls, N. Y., 9 mi. to T. S. Rhodes & Son., McKeesport, Pa. Noted Apr. 12.

★Miss., New Augusta—City let contract 3 public highways to Dabbs & Myers, Meridian. About $200,000. Noted May 31.

★La., Lake Charles—County let contract paving 2 sections roadways to Ritchie Bros., Topeka, $35,000.

★Tenn., Fayette—(Official)—City let contract paving 12,000 sq.yd. and installing pipe sewers, etc., in Court Sq. to Leftwich & Co., Nashville. Noted June 21.

★Ky., Henderson—(Official)—city let contract improving State Aid Road No. 51-2 to T. H. Bennett Co., Mt. Vernon, Ind., $20,135.

★Ky., Paducah—County let contract building 21 mi. roads to R. L. Figg Co., Louisville, $111,089.

Ohio—State Highway Comn., Columbus, received low bids June 27 building roads in various counties as follows:

Belmont Co., Sect. "C" Natl. Rd., Village of Morristown, Union Twp.; grading roadway and paving with brick, 1.13 mi., S. A. Palmer, Marietta, tie with C. E. Wilson & Sons, Barnesville, $37,456; W. M. Miller & Fritz Relino, St. Clairsville, $37,887; Champaign Co., Sect. "Q" Urbana-West Jefferson Rd., Goshen Twp., 0.26 mi., O'Brien & Gregg, Marysville, rein.-con., $11,291, Rennick & Smith, London, brick, $13,236, monolithic brick, $11,767, rein.-con., $11,368; Hancock Co., Sect. "F," Findlay-Kenton Rd., Eagle, Liberty, Jackson and Marion Twps., constructing bridges and culverts, grading and paving roadway: 1.98 mi., Gluss Bros., Hamler, rein. con., $39,755, brick on concrete foundation, $55,784, Johnson Constr. Co., Chicago, asphaltic concrete, $48,760; Hancock Co., Sect. "H-1" Findlay-Sandusky Rd., Biglick Twp., paving with 2-course waterbound macadam; 1.07 mi., Cole Bros. & Dorsey, Van Lue, $9174; W. G. Mustard, Ada, $9461, Souder & Peters, Fostoria, $9900; Hocking Co., Sect. A-1, Logan-McArthur Rd., Falls Twp., constructing bridges and culverts, grading roadway and paving with waterbound and bituminous macadam, 1.46 mi., Wrightsel & Long, Logan, $24,603; Holmes Co., Sect. "H," Mansfield-Millersburg Rd., Monroe Twp., constructing culverts and grading roadway, 1.99 mi., W. H. Miller & R. Rothrock, Ada, $13,155, Lee, Griggs & Anderson, Millersburg, $13,666, R. C. Rousch, Canton, O., $13,875; Perry Co., Sect. "O1," Logan-New Lexington Rd., Coal Twp., constructing drainage structures, grading roadway and paving with brick on concrete foundation, 0.49 mi., Houston & Henderson, Logan, $15,650; Preble Co., Sect. "B," Eaton-Greenville Rd., Monroe Twp., grading and paving with bituminous macadam and constructing bridges and culverts, 1 mi., Hamilton & Bunger, Eldorado, $10,135; Ross Co., Sect. "D," Dayton-Chillicothe Rd., Concord Twp., constructing culverts, grading roadway and paving with brick; 0.87 mi., O. M. Junk, Chillicothe, $34,243, Brewer, Tomlinson & Brewer, Chillicothe, $34,841; Shelby Co., Sect. "A1," Urbana-Sidney Rd., Clinton and Perry Twps., constructing bridges and culverts, grading roadway and paving with bituminous macadam, 1.36 mi., W. G. Mustard, Ada, $19,727, J. C. McCann & Son, Columbus, $19,985, Putnam & Shindledecker, Van Wert, $20,107.

★O., Cleveland—City let contract paving portion of Madison Ave., to Freshwater Constr. Co., 9703 Madison Ave., $30,375; University Rd., Roehl Bros., Lorain and West 25th Sts., $9317; Harris Ave., A. M. Pejea Paving Co., 2359 East 23rd St., $7699. Noted June 14.

O., East Liverpool—City received low bids paving Pennsylvania and Harvey Aves. and Elizabeth St. from Rinehart Bros., 7th St., $90,504; J. H. Maxwell, Farmers Bank Bldg., Pittsburg, $96,672. Noted June 28.

★O., Greenville—City let contract paving Washington Ave. and Vine St. to J. Mannix, Greenfield; Sweitzer St. to McHugh Bros., Springfield.

★O., Lisbon—Co. Comrs. let contract building 7 mi. Lincoln Highway, Madison Twp., to Campbell Bros., Stambaugh Bldg., Youngstown, $57,420.

★O., Napoleon—County let contract improving 6½ mi. Frieda Lange joint county road to J. A. Westrick, Holgate. About $64,688. Noted July 5.

★Ind., Bloomington—Co. Comrs. let contract building George Hanna Pike, Richland Twp., to L. C. McDaniels, $6410; J. R. McDaniel Pike, Bloomington Twp. to C. E. Danner, $10,058.

★Ind., Ft. Wayne—Bd. Pub. Wks. let contract paving portions of Eastbrook Dr., Terrace and Oak Ridge Rd., State Blvd., Neva Ave. and Brook St. to Grace Constr. Co., 702 Winter St.

Ind., Greenfield—(Official)—Co. Comrs. let contract building C. P. T. Merrill Rd., Vernon Twp., to E. McMahon, Fortville, $11,482; L. J. Weber Rd., O. Richey, Greenfield, $13,463; Van B. Cones Rd., Sugar Creek Twp., to E. Gant, Greenfield, $19,000.

★Ind., Hartford City—Co. Comrs. let contract building Cherry St. Rd. to P. Clamme, $35,000.

★Ind., Monticello—Co. Comrs. let contract building Hepp Rd., Liberty Twp., Matthew Rd., Princeton and West Point Twps. to Spencer & Unroe, $5990 and $15,970 respectively.

★Ind., Renssalaer—Co. Comrs. let contract building 3 roads to H. E. Gifford, Rensselaer, 2 roads to Johnson & Sabrin, Medaryville. Noted June 28.

★Ind., Rushville—Co. Comrs. let contract building T. L. Beher Rd., Jackson Twp., and Robert Holy Rd., Center and Jackson Twps., to Ohio Constr. Co., $9995 and $15,195 respectively.

★Ind., Williamsport—(Official)—City let contract William Felix Free Gravel Rd. to C. L. Irwin & Co., Attica, $14,500.

★Mich., Jackson—City let contract paving streets, brick, to W. Ryan, Lansing, asphalt, to Brooks Constr. Co., 2401 Miner St., Ft. Wayne. Total cost, $277,298.

★Illinois—State Highway Comn., Springfield, let contract building roads as follows: Sect. F, De Kalb Co., to Pub. Ser. Constr. Co., Krug Theater Bldg., Omaha, $8706; Sects. D, E, F and G, Jackson Co., Bland & Ferguson, Cairo, $11,968, $5633, $5930 and $4442 respectively; Sect. D, Grundy Co., Booth, Nicholson & Gilchrist, Gardner, $14,110. Noted May 4.

★Ill., Mt. Vernon—Town let contract building 8 mi. hard roads, novaculite, to Hoffman-Townsend & Co., Mt. Carmel, $35,972.

★Wis., Menash—City let contract paving Walnut St., concrete, to J. Schneider.

★Minn., International Falls—City let contract paving 5th and 7th Sts. to Gustafson & Johnson. About $10,564.

★Minn., Minneapolis—County let contract grading and surfacing 28,186 lin.ft. Minnetonka and Eden Prairie Twps.; to J. J. & M. S. Mergens, Deephaven. About $22,819.

★Kan., Junction City—County let contract building Junction City to Ft. Riley Highway to Malley & Kelley, Kansas City, Kan., 70.7c. per sq.yd.

★Neb., Red Cloud—(Official)—City let contract paving 15,000 sq.yd. and [illegible] lin.ft. curb and gutter to Abel Constr. Co., Lincoln, $2.58 per sq.yd. and 79c. per lin.ft. respectively. Noted June 21.

★Mo., Kansas City—City let contract ½ combined concrete paving and curbing on East 62nd St. to Wilcox Contr. Co., 502 Dwight Bldg., $1.475 and 24.5c. respectively; ¾ mi. on Paseo to J. E. Welsh, 1122 East Gillham Rd., $1.49.

★Ark., Jonesboro—City let contract paving 15 mi. streets to Kaw Paving Co., Topeka, $300,000.

★Tex., Dallas—(Official)—City let contract paving 57,848 sq.yd. on Jefferson Ave., bitulithic, to Texas Bitulithic Co., Pastorian Bldg., $1.65 per sq.yd. Noted May 24.

★Washington—State Highway Comn. Olympia, let contract building 3½ mi. Pacific Highway to Independent Asphalt Paving Co., Northern Bank Bldg., Seattle, $62,581. Noted June 21.

★Wash., Bellingham—City let contract paving portion G St., asphalt, to K. Sauset, 711 Caroline St., $10,000.

★Wash., Seattle—(Official)—Co. Comrs let contract paving Houghton-Bellevue Rd. to J. L. Smith, Seattle, $96,000. Noted May 24.

★Wash., Seattle—Co. Comrs. let contract paving Duwamish-Renton Junction Highway to Independent Asphalt Paving Co., Northern Bank Bldg., $71,296.

Wash., Seattle—Bd. Pub. Wks. received low bids paving 40th Ave. et al. and 50th Ave., S., from Superior Constr. Co., 1642 Lane St., $13,143 and $10,427, respectively.

★Wash., Seattle—City let contract laying concrete sidewalks on Greenwood Ave. et al. to E. L. Macquaid, Seattle, $22,386. Noted July 5.

★Ore., Warrenton—(Official)—Co. Comrs., Astoria, let contract constructing Co. Rds. No. 17 and 57 through this city to Montague M. O'Reilley Co., McFall Bldg., Portland, $16,236. Noted June 21.

★Cal., Daly City—City let contract paving streets, sidewalks, and installing sewers to J. G. Harney, Pacific Electric Bldg., San Francisco, $95,506.

★Cal., Los Angeles—City let contract grading and oiling streets, to R. C. Lowell. About $15,750.

★Cal., Los Angeles—City let contract improving Bonnie Brae St. to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg. About $10,756.

★Cal., Manhattan Beach—Bd. Trustees let contract improving 21st and 23rd Sts., Blanche Rd., West Railroad Dr., Granview Ave. and 15 alleys to R. H. Beaton, 623 Beacon St., San Pedro, $54,569.

Cal., San Diego—City received low bids paving portion Walnut, Albatross, Upas, Brant, Thorn and Curlow Sts.; involving 125,118 sq.ft. concrete and asphalt pavement and 742 lin.ft. curb, etc., from Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, 14c. and 35c., respectively.

★Cal., San Diego—City let contract paving Arguello and Hickory Sts., and Arden Way, involving 54,754 sq.ft. paving and 178 lin.ft. curbing to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, 13$\frac{8}{10}$c. and 35c., respectively.

Cal., Stockton—City received low bids paving streets, Villa Addition, from Federal Constr. Co., Call Bldg., San Francisco, $44,182; Paul & Caldwell, Stockton, $49,285; Clark & Henery Constr. Co. Ochsner Bldg., Sacramento, $49,847.

★Cal., Upland—City let contract improving Mountain Ave., paving on 4 in. concrete base with asphalt wearing surface, to W. C. Cline. Noted June 14.

★Ont., St. Thomas—City let contract building cement sidewalks during year to A. E. Ponsford & Co., 605 Talbot St.

★Ont., Windsor—City let contract paving Victoria, Ellis, Bruce and Church Sts., to C. W. Caldwell Sand and Gravel Co., 84 Sandwich St., $44,329; Montmorenci, Marenteete and Elsemere Sts. to Merlo, Merlo & Ray, 116 Windermere Rd., Walkerville, $16,900.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Maryland—Baltimore & Ohio and Pennsylvania railroads will each spend about $150,000 for new tracks to reach proposed

Railways—Steam and Electric (Continued)

army cantonments, near Annapolis Jct.; also to connect with Washington, Baltimore & Annapolis Ry., which runs through camp [illegible] H. Lane, Baltimore, ch. engr., former line, and A. C. Shand, Broad St. Sta., Phila., ch. engr. latter.

North Carolina—Atlantic & Western Ry. plans extension from Lillington to Swansboro, about 100 mi. H. P. Edwards, Sanford gen. mgr. and purch. agt.

Georgia—Western & Atlantic R.R. plans branch line from Graysville to Ft. Oglethorp, right-of-way now being secured. J. A. Baldwin, Atlanta, supt.

Tennessee—Illinois Central R.R. plans new line from Nashville to Chattanooga, through Rutherford, Cannon, Warren, Grundy and Marion Cos. A. S. Baldwin, Chicago, ch. engr.

Ohio—Hillsboro, Cynthiana, Bainbridge & Chillicothe Traction Co. will issue $400,000 bonds, proceeds to be used to construct line from Hillsboro to Chillicothe. J. C. Anderson, Chillicothe, secy.

Arkansas—Missouri Pacific R.R. will build 4 mi. spur from Dalhoff to army cantonment north of Argenta. E. A. Hadley, St. Louis, ch. engr.

Utah—Denver & Rio Grande R.R. plans to extend Park City branch to Ft. Douglas to take care of increased freight demands. About $150,000. C. A. Blake, Salt Lake City, div. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Maryland**—Baltimore & Ohio R.R. let contract branch line from Baltimore to Sparrows Point, about 8 mi., to H. S. Kerbaugh, Inc., Munsey Bldg., Baltimore. Noted Apr. 5.

★**Michigan**—(Official)—Pennsylvania-Detroit R.R. let contract 90 mi. track inbound and classification yards on western outskirts of Detroit to W. S. Newkall Co., 60 Lafayette Blvd., Detroit.

★**Kansas**—Miami Mineral Belt R.R. let contract line from Quapaw, Okla., to Baxter Springs, Kan., about 12 mi., with 8 mi. sidings, to Allhands-Hedges Constr. Co., Springfield, Neb.

EXCAVATION AND DREDGING

Proposed Work

N. J., Jersey City—Dredging—City Comrs. plan to dredge Hudson River, foot of Morgan St. C. A. Van Keuren, city engr.

Fla., Ft. Lauderdale—Drainage—Napoleon B. Broward D. D., recently organized, will drain 528,000 acres in Everglades. A. L. Joiner, secy.

Ark., Marianna—Drainage—Phillips D. D. plans to build drainage system to reclaim Cypress and Flat Fork Sects., involving 45,000 acres cotton land, also 2 canals, combined length 23 mi. W. S. McClintock and M. H. Ford, Marianna, C. Jones, Lexa, comrs.

Ark., Pine Bluff—Drainage—Flat Bayou D.D. plans to build drainage system to reclaim 18,000 acres between Altheimer and Sherrill. About $70,000. J. F. Quattlebaum, pres. Parkes Engr. Co., Pine Bluff, engrs.

BIDS DESIRED

S. C., McCormick—See "Streets and Roads."

Tenn., Dyersburg—Drainage—Until July 25, by Bd. Dir. Lewis Creek D. D., building 8 mi. ditch 8- to 10-ft. bottom width, involving 271,773 cu.yd. excava. and 48.86 acres clearing; also removing 1 building from right of way. L. T. Berthe, Charleston, Mo., dist. engr.

Tenn., Dyersburg—Drainage—Until July 25 by Bd. Dir. North Fork D. D., building 12½ mi. main ditch, 60- to 80-ft. bottom, involving 2,291,610 cu.yd. excava. and 408.5 acres clearing; also building 8 lateral ditches about 8 mi. in length involving 88.5 acres clearing and 184,494 cu.yd. excava. L. T. Berthe, Charleston, Mo., dist. engr.

Ky., Calhoun—Drainage—Until July 18, by Bd. Drainage Comrs., work on D. D. No. 7, involving 148,189.8 cu.yd. earth removal. B. F. Landrum, pres.

Ia., Des Moines—Drainage—Until July 18, by J. M. Wells, engr., for Joint Dist. No. 1, Polk and Story Cos., Nevada, for system involving 16,629 ft. 18-, 26- and 34-in. tile. About $26,405. F. J. Alber, clk. Polk Co. F. E. King, clk. Story Co.

Ia., Mason City—Drainage—Until July 16, by G. E. Frost, co. aud., for constructing D. D. No. 51.

Ia., Nevada—Drainage—Until July 20, by F. E. King, co. aud., building ditches and drains, Richland Twp. D. D. No. 81, (a) open ditch work, involving part of main open ditch 9775 ft. long requiring 49,976 cu.yd. excava.; (b) all tile work involving 13,758 ft. of 10-, 12-, 15-, 22-, 24-, 26-, 34-, 36- and 39-in. tile, inlets and abutments.

Ia., Sac City—Drainage—Until Aug. 1, by E. W. Moyer, aud. Sac Co., building open drainage ditches, Big Cedar D. D. No. 181 of Sac, Buena Vista, Pocahontas and Calhoun Cos. requiring follow excava.; Sect. 1, 546,266 cu.yd.; Sect. 2, 1,513,000 cu.yd.; Sect. 3, 1,797,000 cu.yd.; Sect. 4, 644,397 cu.yd.; Sect. 5, 827,760 cu.yd.; Sect. 6, 7270 cu.yd.; Sect. 7, 8000 cu.yd.; Sect. 8, 66,400 cu.yd.; Sect. 9, 49,100 cu.yd.; Sect. 10, 660 cu.yd.; Sect. 12, 98,766 cu.yd.; Sect. 13, 7297 cu.yd.; Sect. 14, 190,575 cu.yd.; Sect. 15, 2700 cu.yd.

Minn., Marshall—Ditches—Until July 23, by County, building Co. Ditch No. 33, involving 27,365 ft. 5-, 6-, 7-, 8-, 9-, 10-, 12-, 14-, 16-in. tile, cost $5785; Ditch No. 34, 30,691 ft. 5-, 6-, 7-, 9-, 12-, 14-, 15-, 18- and 20-in. tile, $10,433; Ditch No. 35, 21,224 ft. 5-, 6-, 7-, 9-, 10-, 12-, 15-, 16- and 18-in. tile, $8071.

Minn., Morris—Ditch—Until July 19, by County, building Co. Ditch No. 30, involving 46,288 ft. tile of various sizes. C. R. Wolltham, co. aud.

Minn., Walker—Ditch—Until July 30, by C. D. Bacon, co. aud., for Co. Ditch No. 10, 17,265 cu.yd. excava. and 6374 acres clearing.

Ore., Canyon City—Ditch—Until July 16, by Blue Mt. Ditch Co. of Mt. Vernon at office of J. E. Marks, Canyon City, for water ditch 4.75 mi. long, 7 ft. wide on top and 5 ft. wide at bottom, carrying 1½ ft. water.

Cal., Susanville—Irrigation—Until July 31, Bd. Dir. Baxter Creek Irrigation Dist., buiding storage and canal systems except gates; plans involve earth dam 300,000-yd. outlet tunnel and spillways, canals, 2 mains total length 15 mi. About $250,000. H. S. Martin, ch. engr. Noted June 21.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. J., Orange**—See "Streets and Roads."

★**Ia., Spirit Lake**—Drainage—County let contract Drain No. 19 to Clark Constr. Co., Clinton, and Cement Products Co., Spencer.

★**Minn., Chaska**—Ditch—County let contract Co. Ditch No. 6 to Central Contr. Co., Minneapolis. Noted May 31.

★**Minn., Ortonville**—Ditches—County let contract Co. Ditches No. 16 and 17 to Van Lohn & Schabot, Graceville; Ditch No. 19 to G. Swenson, Milbank, S. D.

★**S. D., Madison**—(Official)—Ditches—Co. Comrs. let contract Lake Co. Drainage Ditch No. 5 to W. R. Larson, Sioux Falls, $5996; No. 6, labor, to Myren Bros., $13,975, tile to Sioux City Concrete Pipe Co., Sioux City, $18,390. Noted June 14.

INDUSTRIAL WORKS

Proposed Work

N. Y., Greensboro—Swift & Co., 76 West Monroe St., Chicago, plans fertilizer factory here. About $60,000.

N. Y., New York—Fifth Avenue Coach Co., 10 East 102nd St., plans 4-story factory, 133rd St. and Bway. About $1,000,000. R. W. Meade, pres.

N. Y., New York—New York Butchers Dressed Meat Co., 11th Ave. and 39th St., plans 7-story, 100x125-ft. cold storage plant, 11th Ave. and 40th St. About $250,000.

N. J., Atlantic City—Atlantic City Steamship & Terminal Co., recently incorporated with capital stock of $300,000, plans shipyards here. Address L. D. Algar, 135 Jackson St.

N. J., Kearney—(Arlington P. O.)—Ford Motor Co., Highland Park, Mich., plans plant here. About $225,000.

Pa., Ardmore—See "Reinforced Concrete."

Pa., Phila.—See "Reinforced-Concrete."

Pa., Pittsburgh—Pittsburgh Printing Co., 518 7th Ave., plans 6-story brick and terra cotta factory at Forbes and 6th Aves.

Ga., Savannah—J. C. Lewis Motor Co., 309 Bull St., having plans prepared for 2-story, 60x90-ft. garage. About $60,000.

Ala., Mobile—Gulf, Mobile & Northern R.R. plans terminal improvements here. About $1,000,000. B. V. Wright, Laurel, Miss., ch. engr.

Miss., Meridan—City having plans prepared for ice plant. About $75,000. J. W. Parker, mayor.

O., Cincinnati—Worthington Pump and Machinery Co., 1504 1st Natl. Bank Bldg., had plans prepared for factory addition. About $100,000.

O., Columbus—Pennsylvania Lines West of Pittsburgh (Southwest System), will build new shops here. About $100,000. W. Cushing, Pittsburgh, ch. engr. M. W.

Ill., Chicago—See "Reinforced Concrete."

Ill., Chicago—Continental Can Co., 72 West Adams St., having plans prepared large can factory at West 65th St. and South 54th Ave. About $4,000,000.

Ill., Chicago—O. Heineman Co., 2701 Armitage Ave., plans 5-story mill on Fairfield Ave. About $100,000.

Wis., Milwaukee—W. G. Kellogg and C. Petit, 108-373 Bway., plan 500,000-bushel capacity elevator here. About $200,000.

Wis., Milwaukee—Globe Seamless Tubes Co., Burnham St., plans addition to plant in West Milwaukee. About $50,000.

Wis., Rosendale—Libby, McNeil & Libby, Union Stock Yards, Chicago, having plans prepared for condensary at Rosendale. About $50,000.

Ia., Sioux City—Sioux City Gas & Electric Co., 509-511 Pierce St., plans steel and frame addition to power plant. About $200,000. O. W. Harrod, engr.

Minn., Duluth—Duluth Bedding Co., 409 Lake Ave., plans new factory. About $65,000. C. Lavick, pres.

Neb., Omaha—See "Reinforced Concrete."

Mont., Great Falls—Anaconda Co. plans rod and wire mill at Boston & Montana smelting works here. About $500,000.

Mont., Great Falls—E. K. Cherington, Great Falls, plans warehouse and store here. About $70,000.

Tex., Temple—Atchison, Topeka & Santa Fe Ry. (Western Lines), plans brick freight depot and large warehouse here. About $85,000. F. M. Bisbee, Amarillo, ch. engr.

Ore., Medford—R. H. Parsons, Hillcrest Orchards, Seattle, plans cold storage warehouse here. About $60,000.

Ore., Oroville—Great Western Power Co., 14 Sonsome St., San Francisco, plans plant here. About $6,000,000. E. W. Beardsley, San Francisco, supt.

Ont., Hamilton—Canada Screw Co., Wellington St., W., plans brick addition to factory. About $100,000.

BIDS DESIRED

N. Y., Brooklyn—(Official)—Until July 25, by State Hospital Comn., Albany, for refrigeration equipment for storehouse and cold-storage building, Brooklyn State Hospital. E. S. Ellwood, secy.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Brooklyn**—See "Reinforced Concrete."

★**Md., Baltimore**—Baltimore Dry Dock & Shipbuilding Co., 1720 Thames St., let contract for plant at Locust Point to Raymond Concrete Pile Co., 90 West St., New York City. About $2,000,000. Noted June 28.

★**O., Cincinnati**—Eflerose Sugar Co., recently organized, let contract 1-story brick, concrete and steel plant, 70th Ave., and Cleveland, Cincinnati, Chicago & St. Louis R.R. and Carthage Ave., to Ohio Bldg. & Constr. Co., Burnett near McMillan St., Mt. Auburn. About $50,000.

★**O., Cleveland**—See "Reinforced Concrete."

★**Ill., Chicago**—Illinois Steel Co., 208 South La Salle St., let contract 1-story steel mill, 86th and Mackinay Sts., to L. C. C. Holmboe, Chicago. About $100,000.

★**Minn., Minneapolis**—See "Reinforced Concrete."

★**Tex., Houston**—Swift & Co., 76 North Monroe St., Chicago, let contract cottonseed oil refinery at Houston Heights, to Horton & Horton, McKinney and Velasco Sts., $250,000.

★**Wash., Seattle**—Earl Fruit Co. let contract 10 warehouses to Hurley-Mason Co., Hoge Bldg. About $500,000.

★**Ont., Toronto**—See "Reinforced Concrete."

BUILDINGS

Proposed Work

N. H., Laconia—Dormitory—State having plans prepared by C. R. Whitcher, archt., The Beacon, Manchester, 2-story, at School for Feeble-Minded. About $58,000.

Buildings (Continued)

Mass., Lowell—School—Lowell Training School plans 3-story, 60 x 140-ft. brick addition on Wonalancet St. About $100,000. M. F. Davis and F. W. Stickney, Hildreth Bldg., archts.

Conn., Waterbury—High School—Bd. Educ. soon receives bids, 3-story, 190 x 196-ft. L. A. Walsh, 51 Leavenworth St., archt. About $539,916.

N. Y., Brooklyn—Exchange—New York Telephone Co., 15 Dey St., New York City, having plans prepared by McKensie, Voorhees & Smelin, archts., 1123 Bway., New York City, 3-story, 56 x 94-ft., brick and stone, Liberty Ave. and Milford St. About $125,000.

N. Y., Brooklyn—Sunday School—Flatbush First Dutch Reformed Church, 900 Flatbush Ave., plans, brick and stone, on east side of Church Ave. About $100,000.

N. Y., Buffalo—Terminal—New York Central R.R. plans. About $4,000,000. G. K. Kittridge, Grand Central Terminal, New York City, ch. engr.

N. Y., Central Islip—Acute Patients' Building—Central Islip State Hospital soon lets contract. About $200,000. L. F. Pilcher, state archt.

N. Y., Long Island City—Loft—Huddleston & Marsh Mahogany Co., 33 West 42nd St., New York City, had plans prepared, 3-story, 100 x 100-ft., brick, at Riker and 9th Aves. About $50,000. E. Hahn, Queens Plaza Ct. Bldg., archt.

N. Y., Mt. Pleasant—Hospital—Westchester Co. Bldg. Comn. having plans prepared by James Brite, archt., 18 East 41st St. and Clark, McMullen & Riley, engrs., 101 Park Ave., both of New York. About $700,000.

N. Y., Newton (Flushing P. O.)—High School—Bd. Educ. plans, 4-story brick addition on Chicago Ave. About $350,000. B. Suydam, Elmhurst, school comr.

N. Y., New York—Hospital—Volunteer Hospital plans 4-story, 75 x 80-ft. addition. About $75,000. Gallington Booth, Beekman and Water Sts., pres. Adolph Mertin, 34 West 28th St., archt.

N. Y., New York—Theater—Felix Isman, 299 Madison Ave., and others, having plans prepared 8th Ave. between 48th and 49th Sts. Severance & Van Alen, 4 West 37th St., archts.

N. Y., New York—Club House—Y. M. H. A. plans, 2½-story, at Franklin Ave. and 169th St., Bronx Boro. About $50,000. L. A. Abramson, 220 5th Ave., archt.

N. Y., New York—Hospital—St. Lukes Hospital plans emergency war hospital on Amsterdam Ave. between 113th and 114th St., 2-story. About $90,000. W. A. Boring, professor of design in Columbia University School of Architecture, archt.

N. Y., Oswego—School—Bd. Educ. having plans prepared, 3-story, brick. M. F. Crimmin, pres. W. Potter, 1 Union Sq., New York City, archt.

N. Y., Riverdale—School—Bd. Educ. plans new building. About $95,000.

N. Y., Syracuse—School—Bd. Educ. having plans prepared, 2- or 3-story, brick and steel, 512 Emerson Ave. About $150,000. G. M. Fairchild, pres., Gordon & Wright, Union Bldg., archts.

N. Y., Syracuse—Temple—Labor Temple Assn. having plans prepared, 3-story, brick, 507-509 East Fayette St. About $50,000. E. E. Battey, 161 West Brighton Ave., archt.

N. J., Camden—Bank—Merchants' Trust Co., Bway. and Carman St., had plans prepared by P. A. Davis, archt., Sansom St., Phila., 1-story, 40 x 90-ft. About $80,000. G. A. Frey, pres.

N. J., Elizabeth—Hospital—Elizabeth General Hospital plans 5-story, 120 x 150-ft. addition. About $500,000. F. J. Faulkes, East Jersey St., pres. Crow, Lewis & Wickenhoefer, 200 5th Ave., New York City, archts.

N. J., Jersey City—Theater—Bon Ton Theater Co. plans rebuild theater recently destroyed by fire. About $50,000.

N. J., Newark—School—Bd. Educ. plans, 3-story, 105 x 137 ft., on Van Buren St. About $139,000.

N. J., Newark—Store and Office—W. B. Wood & Co., 30 Clinton St., having plans prepared, 5-story 30 x 121-ft., at 43 Clinton St. C. E. Murray, 20 Clinton St., archt.

N. J., Newark—See "Miscellaneous."

Pa., Pittsburgh—Store—J. N. McCullough Estate plans, 2-story brick and concrete at 324 5th Ave. About $88,000.

Md., Catonsville—Church—Presbyterian Church having plans prepared, brick and stone. About $50,000. J. E. Nesbit, pastor.

Wash., D. C.—Church—First Reformed Church, 13th and Monroe Sts., N. W., having plans prepared. About $50,000. J. D. Buhrer, 13th and Monroe Sts., pastor.

Va., Ft. Royal—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened June 20. Noted May 31.

S. C., Columbia—School—City had plans prepared for new buildings at Industrial Training School. About $100,000. X. A. Kramer, Magnolia, Miss., archt.

Fla., Key West—Hotel—Florida & East Coast Ry. plan. About $250,000. Address W. A. Blount, Florida & East Coast Ry.

Ala., Flint Ridge—Hospital—Tennessee Coal, Iron & R.R. Co., 1016 Union Trust Bldg., Cincinnati, having plans prepared, 3-story, with 2 wings. About $425,000.

La., Alexandria—Leland University having plans prepared by Favrot Livaudais, archts., Title Guarantee Bldg., New Orleans. About $100,000.

La., Lafayette—School—City voted $75,000 bonds to build school. Address the Mayor.

La., New Orleans—Church—Grace Episcopal Congregation plans to build. About $50,000. A. R. Edbrooks, 923 North Solomon St., pastor.

Tenn., Bartlett—High School—Bd. Educ. of Shelby Co. having plans prepared by McGee & Lester, archts. Scimitar Bldg., Memphis. About $50,000.

Tenn., Chattanooga—High School—Bd. Educ. having plans prepared by R. H. Hunt, archt., James Bldg. About $200,000.

Tenn., Cumberland Gap—Memorial—Lincoln Memorial University had plans prepared by A. L. Fechleimer, archt., 153 Union Trust Bldg., Cincinnati, 2- or 3-story. About $60,000.

Tenn., Kingsport—School—City approved $150,000 bond issue for new school and street improvements. W. M. Pouder, city mgr.

Tenn., Memphis—Hospital—Tri-State Baptist Hospital rejected bids. New bids. About $175,000. C. O. Pfiel, Tenn. Trust Bldg., archt. Noted May 10.

Ky., Ashland—School—City authorized sale of $100,000 bonds for new building.

O., Akron—School—Bd. Educ. having plans prepared by F. L. Packard, 1212 Haydon Bldg., Columbus, and T. R. Ridley, Akron Savings and Loan Bldg., archts., 2- or 3-story. About $500,000.

O., Ashland—Hotel—Otter Hotel—Main St. soon lets contract 5-story, 32 x 80-ft. addition. About $50,000. V. Redding, Bird Bldg., Mansfield, archt. Noted Apr. 26.

O., Carey—Hotel—Shrine of Our Lady of Consolation plans, 3-story, 65 x 80-ft. T. Huber, 750 Spitzer Bldg., Toledo, archt., soon receives bids.

O., Cincinnati—School—Bd. Educ. having plans prepared by Garber & Woodward, archts., Union Central Bldg., 3-story. About $500,000.

O., Cleveland—Welfare Bldg.—Hydraulic Pressed Steel Co., 3152 East 61st St., soon receives bids, 2-story, 45 x 165-ft. brick, steel and rein. con. About $50,000. W. S. Ferguson Co., 1900 Euclid Ave., archts.

O., Cleveland—Association—F. C. Worth, 2268 East 49th St., soon lets contract, brick and steel. Central and East 55th Sts. About $200,000. J. Eisenman, 491 Arcade Bldg., archt.

O., Cleveland—Church—St. Martins Episcopal Congregation having plans prepared by Meade & Hamilton, archts., 1002 Garfield Bldg., brick, on Euclid Heights. About $150,000.

O., Cleveland—Theater—Stork Amusement Co., care of A. A. Silberberg, having plans prepared by S. H. Weis, archt., 1030 Schofield Bldg., brick and concrete. About $50,000.

O., Cleveland—Home—Montefiore Home for Aged and Infirm Israelites plans, 2- or 3-story, 300 x 800-ft. About $75,000. L. M. Wolf, 414 Swetland Bldg., chn. C. R. Greco, 729 Guardian Bldg., archt.

O., Cleveland—Natatorium—Cleveland Natatorium Co., American Trust Bldg., soon lets contract, 119x125 ft., brick and steel, East 66th and Euclid Ave. About $100,000. H. Kregelius, 418 American Trust Bldg., archt.

O., Cleveland—Junior High School—Bd. Educ. having plans prepared by C. S. Schneider, archt., 2258 Euclid Ave., 2- or 3-story. About $100,000.

O., Cleveland Heights—(Warrensville P. O.)—Home for Aged—Montefiore Home for Aged and Infirm Israelites having plans prepared by C. R. Greco, archt., 729 Guardian Bldg., Cleveland, 2-story. About $75,000.

O., Columbus—Y. M. C. A. soon lets contract 4-story building. About $100,000. G. E. Smith, 175 North Front St., chn. Shattuck & Hussey, 19 South La Salle St., Chicago, and O. C. Darst, 1109 Brunson Bldg., archts.

O., Columbus—School—Franklin Twp. plans 2-story high and grade. About [illegible]000. Mills & Millspaugh Co., 67 East Long St., archts., soon receive bids.

O., East Cleveland—(Cleveland P. O.) Junior High School—Bd. Educ. having plans prepared, 2- or 3-story. C. S. Schneider, 2258 Euclid Ave., Cleveland, archt. About $100,000.

O., East Cleveland—(Cleveland P. O.) Technical High School—Bd. Educ. plans, 2-story. About $200,000. W. H. Nicklas, 1900 Euclid Ave., Cleveland, archt.

O., Ironton—Hotel, Store, Etc.—Ironton Hotel Co. had plans prepared by Howard & Merriam, archts., 8 East Broad St., 5-story, 32 x 132-ft. About $125,000.

O. Latty—School—Bd. Educ. having plans prepared, 2-story. About $50,000 or $60,000. F. L. Packard, 1212 Hayden Bldg., Columbus, archt.

O., Rushville—High and Grade School—Bd. Educ. plans, 2-story. About $70,000. F. L. Packard, Hayden Bldg., Columbus, archt.

O., Toledo—Museum—Toledo Museum of Art having plans prepared by Green & Wicks, archts, 110 Franklin St., Buffalo, for addition. About $600,000. G. W. Stevens, Monroe and Scottwood Sts., dir.

O., Zanesville—Lodge—Loyal Order Moose plans. About $50,000.

Ind., Evansville—High School—Bd. Educ. having plans prepared by C. Shopbell & Co., archts., 707 Furniture Bldg., 2-story, 84 x 300-ft., junior high school. About $100,000.

Ind., Vincennes—Church—First M. E. Congregation having plans prepared by L. H. Ostehage, archt., 2nd Natl. Bank Bldg., 1-story, 76 x 116-ft. About $75,000.

Mich., Detroit—School—Bd. Educ. having plans prepared by Malcomson & Higgenbotham, archts., 404 Moffatt Bldg., 2-story, for crippled children. About $100,000.

Mich., Detroit—Hospital—Ford Hospital plans 4-story addition. About $1,500,000. E. L. McPhee, Hamilton and West Grand Blvd., supt.

Mich., Hancock—Church—First Congregational Church soon receives bids. About $75,000. L. Christensen, Houghton, Secy. H. T. Liebert, Marathon Co. Bank Bldg., Wausau, Wis., archt.

Mich., Marquette—High School—Bd. Educ. having plans prepared, 3-story. About $150,000. A. R. Watson, supt. J. D. Chubb, 109 North Dearborn St., Chicago, archt.

Ill., Chicago—Church—Grace Episcopal Congregation having plans prepared by B. G. Goodhue, 2 West 47th St., New York City, and Lowe & Bollenbach, 14 East Jackson Blvd., archts., rebuilding church and chapel. About $200,000.

Ill., Chicago—Church—16th Church of Christ Scientist having plans prepared by H. L. Cheney, archt., 30 North Michigan Ave., 120 x 160-ft. About $100,000.

Ill., Niles Center—Club House—New Evanston Golf Club having plans prepared, 1-, 2- and 3-story, 60 x 280-ft. club house and golf links. About $200,000. C. F. Yegge, pres., and W. Ahlschlger, archt., both of 111 West Washington St., Chicago.

Ill., Riverside—Home—Scottish Old People's Home, recently destroyed by fire, will be rebuilt. Mundie & Jensen, 39 South La Salle St., Chicago, archts., soon receive bids. About $100,000.

Ill., Rockford—Bank and Office—Porter Bldg. Co., 302 State St., had plans prepared by F. Carpenter, archt., 420 Brown Blk., 10-story, 66 x 114-ft. About $275,000.

Wis., Ladysmith—Convent and Hospital—Mantelate Sisters of St. Marys, having plans prepared 3-story, 48 x 100-ft. and 2-story, 40 x 90-ft. H. F. Lieber, Marathon Co. Bank Bldg., Wausau, archt.

Wis., Milwaukee—Restaurant—Grove Investment Co., care W. Schroeder, 86 Michigan St., plans 6- or 8-story. About $100,000. Kirchoff & Rose, Majestic Bldg., archts., soon receives bids.

Wis., Wauwatosa—Children's Cottage—Bd. Administration plans. About $60,000. D. H. Davies, secy., R. A. Messmer & Bros., Majestic Bldg., Milwaukee, archts.

Buildings (Continued)

Ia., Glidden—School—Consolidated Dist. having plans prepared, 3-story, 144 x 144-ft. brick, terra cotta and rein.-con. About [illegible]. H. M. Marker, Jefferson, and N. Vorse, 911 S. & L. Bldg., Des Moines, archts.

Ia., Jordan—School—City plans election July 16 to vote on $60,000 bond issue to build school.

Ia., Mapleton—High and Grade School—Bd. Educ. soon lets contract, 3-story, 79 x 164-ft. Trunk & Gordon, Donnell Court Bldg., St. Joseph, Mo., archts.

Ia., Sioux City—Church—Trinity Lutheran Church plans, 1-story, 60 x 100-ft. About $75,000. D. R. Huber, pastor. Beuttler & Arnold, 609 Security Bldg., archts., soon receive bids.

Ia., Sioux City—Hotel—W. B. Nation having plans prepared, 10-story. F. W. Fitzpatrick, 4200 16th St., Wash., D. C., archt.

Minn., Hibbing — Home — Elks Lodge plans to build. About $60,000. Holstead & Sullivan, Pallidio Bldg., Duluth, archts.

Minn., Minneapolis—Hospital—City Hospital having plans prepared, 3-story. About $60,000. A. S. O'Donnell, superv. Long, Lamoreaux & Long, 830 Hennipin Ave., archts.

Minn., New Ulm—Church—St. Marys Congregation having plans prepared for parochial school and church. R. Chlinkert, pastor. Parkinson & Dockendorf, Linker Bldg., La Crosse, Wis., archts.

Minn., St. Paul — Schools — Bd. Educ. plans 30-room intermediate and 20-room elementary school. About $365,000. A. Wunderlich, school comr.

Minn., St. Paul—College—Concordia College plans to build on Syndicate Ave., between Carroll and Iglehart Aves. About $100,000.

Minn., St. Paul—Hotel—J. H. Meyering, Leamington Hotel, Minneapolis, having plans prepared, 10-story. About $600,000. Cederburg & Van Kirk, 300 Endicott Bldg., St. Paul, archts.

Minn., Shakopee—Women's Reformatory—State Bd. Control will build, 3-story, 65 x 125-ft. About $200,000. D. F. Mullen, secy. C. H. Johnston, 715 Capital Bldg., St. Paul, archt.

Kan., Augusta—School—Bd. Educ. rejected bids. New bids. About $50,000. G. P. Washburn & Son, 222 South Main St., Ottawa, archts.

Kan., Hutchinson — High School — Bd. Educ. soon lets contract, 4-story, 95 x 114-ft. About $125,000. W. E. Hulse & Co., First Natl. Bank Bldg., archts.

Kan., Kansas City — Stations — Kansas City Terminal Ry. plans 2 passenger stations. About $50,000. J. V. Hanna, 209 Union Sta., Kansas City, Mo., ch. engr.

Kan., Leavenworth—School Bd. Educ. had plans prepared for 3-story addition. W. P. Feth, Feth Bldg., archt.

Neb., Lincoln—Bank and Office—Nebraska Central Bldg. and Loan Assn., care of Folson Bros., 1423 O St., soon receives bids, 5-story, 25 x 142-ft. About $80,000. Fiske & Meginnis, 529 Bankers' Life Bldg., archts.

Neb., Omaha—Church—Second Church of Christ Scientist plans new building. About $50,000. H. P. Dunker, chn. bldg. com.

S. D., Mitchell—School—Bd. Educ. had plans prepared for 2-story addition. About $75,000. A. B. McKeel, clk., Holmes & Flinn, 8 South Dearborn St., Chicago, archts.

Mont., Great Falls—School—City voted $125,000 bonds to build junior high school.

Mo., Kansas City—Club House—Kansas City Athletic Club having plans prepared, 12-story. About $1,000,000. L. C. Smith, chn. bldg. comn. Smith, Rea & Lovitt, Washington Arcade, archts.

Mo., St. Louis—School—Bd. Educ. plans 2-story, 80 x 110-ft. About $125,000. C. P. Mason, secy., R. M. Milligan, B. of E. Bldg., archt.

Tex., Austin—Library—City plans election to vote on $100,000 bond issue to build library. A. P. Woolridge, mayor.

Tex., Dallas—Terminal—Texas Electric Ry. plans to erect new terminal building. About $100,000. O. A. Teal, Dallas, chief engr.

Tex., Denton—Dormitory—College of Industrial Arts had plans prepared for hall and dormitory. E. O. Taylor & C. W. Bulger, Dallas, archts. About $280,000.

Tex., Waco—Store—Williams Dry Goods Co. having plans prepared by Ross & Cason, archts., Amicable Bldg. About $100,000.

Okla., Oklahoma—Art Bldg.—City and State Exposition Co. plan, 1-story, 200 x 300-ft. brick and rein.-con. About $100,000. Layton & Smith, 701 Majestic Bldg., archts.

Okla., Oklahoma—City and State Exposition Co. plans prepared, 1-story, 200 x 300-ft., rein.-con. and brick building. About $100,000. Layton & Smith, Majestic Bldg., archts.

Okla., Stillwater—Science Hall—State Bd. Agriculture plans 2-story, 80 x 110-ft. About $100,000. F. C. Biggin, state archt.

Colo., Greeley—Theater—H. T. Nolan, 1301 Ogden Ave., Denver, and others, plan, on 9th street. About $100,000.

Utah, Salt Lake City—Gymnasium—Regents of University of Utah plan. About $512,500.

Ore., Ashland—High School—City voted $70,000 bond issue for high school.

Cal., Healdsburg — School — City voted $100,000 to build school.

BIDS DESIRED

N. Y., Troy—High School—Until Aug. 20 by Bd. Educ., on Columbia Terrace. Tooker & Marsh, 101 Park Ave., New York City, archts.

Fla., Jacksonville — School—Until July 21, by F. A. Hathaway, supt. bd. educ., for 10-room school at Johnson Addition, La Villa Park. About $65,000. Noted Apr. 5.

Ind., Ft. Wayne—(Official)—Until Aug. 1, by C. R. Weatherhogg, archt., Hamilton Natl. Bank Bldg., for 7-story rein.-con., stone and brick building at East Washington Blvd. and Barr St. for Y. M. C. A. About $225,000. A. H. Perfect, chn. Noted May 24.

Ind., Greencastle—(Official)—School—Until July 20 by Bd. Educ. About $100,000. H. L. Bass, Hume-Mansur Bldg., Indianapolis. Noted June 21.

Ia., Mapleton—Schools—Until July 16, by N. W. Pike, secy. bd. educ., 3-story, 79x164-ft. About $95,000. Trunk & Gordon, Court Bldg., St. Joseph, Mo., archts.

Minn., Randolph—School—Until July 18, by G. L. Morrill, clk., bd. educ. About $50,000. Tyrie & Chapman, Auditorium Bldg., Minneapolis, archts. Noted May 31.

N. D., Blue Hill—School—Until July 16, by O. Johnson, clk. bd. educ. About $80,000. G. R. Horton, Jamestown, archt.

Colo., Monte Vista—High School—Until July 16, by G. B. Robertson, archt., Majestic Bldg. About $60,000.

Okla., Stillwater—Court House and Jail—Until Aug. 1 by W. T. Keys, co. clk. About $100,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Dorchester**—School—Bd. Educ. let contract, 2-story, 151x159-ft., brick and limestone, in Glenway St., to W. H. Haynes, 40 Court St., Boston. About $275,000.

★**N. Y., Athens**—School—Bd. Educ. let contract to William B. Richards, 24 Gates St., Wilkes-Barre. About $51,485.

★**N. Y., Brooklyn**—Church—First Baptist Congregation, Pierpont St., let contract rebuilding, Flatbush Ave. and Schermerhorn St., to H. J. Brown & Son, 1354 Fulton St. About $75,000.

★**N. Y., Brooklyn**—Church—First Baptist Congregation, 247 New York Ave., let contract rebuilding to H. J. Brown & Son, Inc., 1534 Fulton St. About $75,000.

★**N. Y., Brooklyn** — Theater — Putnam Theatrical Co., let contract, 124x205-ft. terra cotta, brick and granite at Fulton, Livingston and Smith Sts. and Gallatin Pl., to Fleischman Constr. Co., 7 West 45th St., New York City. About $50,000.

N. Y., Brooklyn—Hospital—C. C. Peck Memorial Hospital let contract 5-story brick and stone addition to J. G. Hegeman, Inc., 29 West 42nd St., New York City.

★**N. Y., New York** — Exchange — New York Telephone Co., 15 Dey St., let contract, 5-story, 66 x 85-ft. addition at 336 West 150th St. to E. E. Paul Co., 101 Park Ave., $100,000.

★**N. Y., New York**—Club House—Columbia University Club let contract, 7-story, 100 x 125-ft., to J. Laimbeer, 103 Park Ave.

★**N. Y., New York**—Theater—1620 Bway. Co. let contract, 100 x 143-ft., to Lippe Contr. Co., 52 Vanderbilt Ave. About $300,000.

★**N. Y., Niagara Falls**—Y. W. C. A., care of Mrs. P. H. Barton, 352 Buffalo Ave., let contract to Brass Bros., 1110 Whitney Ave., $66,000.

★**N. Y., Syracuse**—School—Bd. Educ. let contract to Phelan Bldg. and Constr. Co., 79 River St., Hoboken. About $500,000.

★**N. J., Newark**—Theater—A. W. Moore, 22 Green St., let contract, 1- and 2-story, 125x150-ft. brick, on Mt. Prospect Ave. and Heller Pkway, to I. Feinsod, 402 Hunterdon St. About $70,000.

★**Pa., Brownsville** — School—Bd. Educ., Luzerne Twp., let contract 2-story, 65 x 110-ft., to Brownsville Constr. Co., Brownsville. About $60,000.

★**Pa., Locust Gap** — High School—Bd. Educ. let contract 2-story, 80 x 140-ft., to A. Breslin, Summithill. About $80,000.

★**Pa., Phila.**—Hotel—Hotel Rodman let contract, 7-story, 60 x 160-ft., Brown and Broad Sts., to Steele & Sons Co., 1600 Arch St. About $142,500.

★**Pa., Phila.** — Office — Studebaker Corp. let contract, 7-story, at Broad and Brown Sts., to Wm. Steele & Sons Co., 1600 Arch St. About $350,000.

★**Pa., Pittsburgh** — Theater — Olympic Theater, J. Baziotes & M. Antonopolis, 318 5th Ave., let contract addition and remodeling to H. Miller & Sons, May Bldg. About $100,000.

★**Va., Petersburg**—School—Bd. Educ. let contract to D. P. Bass, Petersburg. About $79,972.

★**Va., Richmond** — Hospital — Memorial Hospital, care of Virginia Medical College, 11th and Broad Sts., let contract 4-story addition to A. M. Walkup & Co. Noted June 28.

★**Fla., Miami**—Hospital—City let contract to St. John Constr. Co. About $52,218.

★**Ala., Ensley**—Bank—Bank of Ensley let contract new building, Ave. E and 19th St., to G. W. Muller Bank Fixture Co. About $150,000.

★**O., Dayton**—Theater and Store—Dayton Theater Bldg. Co., care of F. Rike, Main and 2nd Sts., let contract, 3-story, 99 x 198-ft., to Danis Hunt Co., 1st and Webb Sts. About $225,000.

★**Ind., Auburn**—Jail—Dekalb Co. let contract 2-story, 43 x 115-ft., to H. H. Achemier. About $50,000.

★**Mich., Highland Park**—High School—Bd. Educ. let contract addition to Bryant & Detwiler, 2336-39 Dime Bank Bldg., Detroit. About $550,000.

★**Ill., Chicago**—Theater, Stores, Etc.—Thomas Chamales, 4800 Bway., let contract, 3-story, 149 x 163-ft., to Kusel & Harris, 30 North La Salle St. About $300,000.

★**Ia., Nevada**—Home—Story Co. let contract 2-story, 92 x 118-ft., brick, stone and rein.-con., to W. F. Kucharo, Security Bldg., Des Moines. About $56,960.

★**Ia., Woodward**—Custodial—Bd. Control let contract, 2-story, 35 x 220-ft., brick, tile and rein.-con., to J. E. Tusant & Son, 934 13th St., Des Moines. About $72,924.

★**Minn., Ironton**—School—Bd. Educ. let contract 2-story, 50 x 102-ft., to Bracker Constr. Co., 629 Monmouth Bldg., Minneapolis. About $100,000. Noted June 18.

★**Neb., Hastings**—School—Bd. of Educ. let contract to Olson & Johnson, 508 Montana Bldg., Missoula, Mont. About $55,825.

★**Neb., Omaha**—Office—McCaffrey Motor Co. let contract, 3-story, brick and stone, to Olson & Johnson, 638 1st Natl. Bank Bldg. About $50,000.

★**Neb., York**—Hotel—York Hotel Co. let contract to Peter Kiewit & Son, 24th and Pratt St., Omaha. About $108,000. Noted May 3.

★**Neb., York**—Schools—Bd. Educ. let contract, 3-story, 53 x 94-ft. to Olson & Johnson, Omaha. About $142,000.

★**Mont., Billings**—Hospital—St. Vincent's Hospital let contract addition to Gagnon & Co., 201 22nd St. About $100,000.

★**Mo., St. Louis** — Theater — Vaudeville Theater Co., 705 Olive St., let contract alterations to theater and office building to Federal Constr. Co., 812 Olive St., $75,000.

★**Mo., St. Louis**—Y. M. C. A. let contract building to John Hill Constr. Co., 1519 Water St., Spokane. About $150,000.

★**Tex., Beaumont**—Office—B. Deutser let contract remodeling 2-story office building and constructing 2-story addition to T. Gibson, Port Arthur. About $60,000.

★**Tex., Dallas**—Bank and Office—American Exchange Natl. Bank let contract, 15-story, 100 x 145-ft., to J. W. Thompson, St. Louis.

Buildings (Continued)

★**Tex., El Paso**—See "Reinforced-Concrete."

★**Tex., Sour Lake**—School—Bd. Educ. let contract, 135 x 135-ft., rein.-con. and brick, to M. C. Bowden, 1801 C St., Galveston. About $75,000.

★**Tex., Victoria**—High School—Bd. Educ. let contract 3-story, fireproof, to S. M. Bailey, $54,487.

Ariz., Tucson—School—Bd. Educ. received low bid from W. H. Young. About $93,236.

★**Ore., Pendleton**—Mausoleum—City let contract to Parker & Benfield, Portland. About $60,000.

Cal., Los Angeles—Hotel—Bear Lake Tavern Co., Security Bldg., let contract 80 x 265-ft., at Bear Lake, to C. L. Robinson, Hibernian Bldg. About $60,000.

★**Cal., Yreka**—School—Bd. Educ. let contract to T. B. Goodwin, San Francisco, about $52,160.

FEDERAL GOVERNMENT WORK

Proposed Work

Pa., Monessen—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids. Noted July 5.

Wash., D. C.—Emergency Hospitals—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., soon lets contract building emergency hospitals at Annapolis, Md., Brooklyn, N. Y., Quantico, Va., Key West, Fla., Mare Island (Vallejo P. O.), Cal., Puget Sound (Bremerton P. O.), Wash., Portsmouth, N. H., Jamestown, Va., Newport, R. I. and Norfolk, Va.

N. C., Wash Woods—Coast Guard—Navy Dept., U. S. Coast Guard Headquarters, Wash., rejected bids opened June 16. Noted June 28.

Cal., San Francisco—Quarters—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., received no bids July 2 for chief petty officers' quarters at Naval Training Station.

BIDS DESIRED

R. I., Newport—Primer Filling House—Until July 30 by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., building 2-story, rein.-con., wood finished floors over concrete, brick panels, steel sash, built-up roofing on concrete slab, electric elevator and lighting at Naval Torpedo Station, Narragansett Bay.

N. Y., New York—Until July 30, by U. S. Engr. Office, Army Bldg., 39 Whitehall St., dredging in Wappinger Creek and Tarrytown and Peekskill Harbors, N. Y.

Wash., D. C.—Post Office—Until Aug. 17, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Ga., West Point—Post Office—Until Aug. 14, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Ala., Jasper—Post Office—Until July 17, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Mo., St. Louis—Levee Work—Until July 21, by Mississippi River Comn., 1311 International Life Bldg., for 259,100 cu.yd. earthwork in Sny Island Levee D. D., Ill.

Wash., Puget Sound—(Bremerton P. O.)—Caisson Gate—Until July 25, by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., caisson gate for shipbuilding dock at Naval Station.

Wash., Puget Sound—(Bremerton P. O.)—Storehouse—Until July 25, by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., at Navy Yard.

Wash., Keyport—Tanks and Towers—Until July 30, by Bureau Yards and Docks (F. R. Harris, ch.)—Navy Dept., Wash., 2 steel water tanks and tower at torpedo station.

Cal., Mare Island—(Vallejo P. O.)—Cranes—Until July 25, by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., furnishing electric traveling cranes for extension to machine shop.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Pa., Phila.**—Storehouse—Bureau Yards and Docks, Navy Dept., Wash., let contract advance base storehouse at Marine Barracks, to McCloskey & Bahl, 1620 Thompson St., $75,914. Noted July 5.

Wash., D. C.—Buildings—Bureau Yards and Docks, Navy Dept., received low bids, June 25, 14 magazine buildings: 7 for Lake Denmark, 2 for Iona Island, N. Y., 5 for Hingham, Mass., as follows: Snare & Triest, Woolworth Bldg., New York City, $546,000; J. C. Lyons Sons Co., 30 East 42nd St., New York City, $63,000; Kennedy & Paterson, 7 Water St., Boston, $416,400; J. H. Miller, Baltimore, $347,700; Boyle-Robertson Co., Evans Bldg., $360,275. Noted May 31.

Wash., D. C.—Canal Wall—Dist. Comrs., Room 509, Dist. Bldg., received low bids July 2, (a) ordinary excavation above elevation, (b) ordinary excavation below elevation, (c) rock excavation above elevation, (d) rock excavation below elevation, (e) concrete above elevation, (f) concrete below elevation, from W. F. Cush, 1st and F Sts., (a) $1.75, (b) $2.00, (c) $3.50, (d) $5.00, (e) $9.50, (f) $10.00; W. D. Murray, Benning Rd., (a) $2.17, (b) $3.12, (c) $2.75, (d) $2.75, (e) $11.00, (f) $12,000. Noted June 28.

★**Wash., D. C.**—Cement—F. G. Lane, secy. of Interior, U. S. Rec. Ser., let contract furnishing portland cement for various reclamation projects during year as follows: Southwestern Portland Cement Co., El Paso, 9000 bbls., $2.28 per bbl.; Riverside Portland Cement Co., Crestmore, Cal., 3250 bbl., $1.90; Dewey Portland Cement Co., Dewey, Okla., 2960 bbls., $1.80; Pacific Portland Cement Co., Tolenas, Cal., 22,463 bbls., $1.80; International Portland Cement Co., Irwin, Wash., 5100 bbls., $2.10; Three Forks Portland Cement Co., Trident, Mont., 7055 bbls., $2.30; U. S. Portland Cement Co., Concrete, Colo., 22,200 bbls., $2.00; Portland Cement Co. of Utah, 8 Exchange Pl., Salt Lake City, 2000 bbls., $2.30.

★**Wash., D. C.**—Coast Guard—Navy Dept., U. S. Coast Guard Headquarters, let contract Coast Guard Station No. 184, Creeds Hill, N. C., to J. W. Martin, Elizabeth City, N. C., $17,567.

★**Wash., D. C.**—Generators—Bureau Yards and Docks, Navy Dept., let contract motor-generator sets at Norfolk, Puget Sound, Phila., Charleston, S. C. and Washington Navy Yards to General Electric Co., River Road, Schenectady, N. Y. Total cost, $155,675.

★**Wash., D. C.**—Quay Wall—Bureau Yards and Docks, Navy Dept., let contract extension to quay wall to Clark & Winston Co., 10th St., Wash., D. C., $21,965.

W. Va., Charleston—Cranes—Bureau Yards and Docks, Navy Dept., Wash., received low bids furnishing electric traveling cranes for projectile plant, from Cleveland Crane & Engr. Co., Wycliff, O., (a) $55,965, (b) $34,925, (c) $11,345, (d) $29,075, time 3 to 6 mos.; Manning, Maxwell & Moore, 119 West 40th St., New York City, (a) $48,864, (b) $27,918, (c) $9338, (d) $28,956, spare parts for motors, $224, time 224 to 252 days; Morgan Engr. Co., City National Bank Bldg., Dayton, (a) $61,850, (b) $37,450, (c) $13,145, (d) $36,300, f.o.b. Alliance, freight allowed to Charleston; delivery, 8 mos.

★**Ky., Louisville**—Mason & Hanger Co., general contractors for U. S. cantonment, sublet contract building 6-mi. asphalt and concrete roadway through camp to H. Bickel Co., 1601 South 6th St., $75,000 to $100,000; plumbing for cantonment to City Plumbing & Heating Co., $300,000.

★**Ill., Great Lakes**—Bridges, etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract building temporary but substantial bridges to Leyden-Ortseifen Co., Monadnock Bldg., Chicago, cost plus basis.

★**Ill., Great Lakes**—Dormitory, Etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract dormitory, latrine, mess hall and accessory buildings for 2 detention units, etc., at Camp Ross, to J. O. Heyworth, 606 South Michigan Ave., Chicago, cost plus basis.

★**Ill., Great Lakes**—Dormitory, etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract dormitory, latrine, mess hall and accessory building for 4 regiments to Paschen Bros., Conway Bldg., Chicago, cost plus basis.

★**Ill., Great Lakes**—Sewerage System, Etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract sewerage system and road work at U. S. cantonment to H. J. Nichols, 459 Rookery St., Chicago, cost plus 10%.

Ark., Prescott—Post Office—J. A. Wetmore, superv. archt., received low bid, July 28, from A. Blair, Hill Bldg., Montgomery, Ala., $49,520. Noted June 7.

★**N. Mex., Pueblo Boneto**—Mess Hall, Etc.—Comr. Indian Affairs, Wash., let contract mess hall and schoolhouse to [illegible] Zillmer, Albuquerque, $22,705 and [illegible] respectively; work complete $50,2[illegible]

MISCELLANEOUS

Proposed Work

Dam—Readsboro, Vt.—New England Power Co. plans earthen dam, 200 ft. high to create storage basin having capacity of 3,600,000 cu.ft.; from this dam tunnel is to be bored through mountain a distance of 14,000 ft. to point known as Davis Bridge where power plant with a capacity of [illegible] hp. will be erected. H. I. Harriman, pres.

Parks—Newark, N. J.—Bd. Freeholders will sell $500,000 bonds July 24, to acquire lands for public parks and erecting buildings thereon. F. E. Ward, clk.

Elimination of Grade Crossings—N. J., South Orange—See "Sewers."

Park Improvements—Kansas City, Mo.—Council passed ordinance to issue $100,000 bonds to improve Brush Creek Park. H. L. Jost, mayor.

Channel—Beaumont, Tex.—City election in August to vote on $300,000 bonds to deepen Beaumont ship channel.

Park Improvements, Etc.—Utah, Salt Lake City—See "Sewers."

Tunnels—San Francisco, Cal.—City receives bids in August building 19 mi. tunnels on Hetchy-Hetchy aqueduct. About $6,000,000.

Harbor Improvements, etc.—Toronto, Ont.—Bd. Control plan to issue $4,000,000 for harbor improvements and $720,000 for civic hydro system.

BIDS DESIRED

Tide Gate with Spillways, etc.—New Haven, Conn.—Until July 18, by F. L. Ford, city engr., for tide gate with spillways and river walls on Mill River, north State St.

Stations—New York, N. Y.—Until July 18 by Pub. Ser. Comn., 120 Bway., station finish for 2 stations on Bway-4th Ave. Rapid Transit R.R.

Street Signs—Camden, N. J.—Until July 16 by Bd. Freeholders, for 1000 metal street signs. F. S. Vanhart, chn. st. com.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Riprap—Richmond, Cal.—Bd. Harbor Comn. received low bids, 12,000 tons riprap for clay bulkhead in inner harbor, from Plate Bros., $2.73 per ton; Healy-Tibbits Constr. Co., 9 Main St., San Francisco, $2.78; Daniel Contr. Co., 503 Market St., San Francisco, $3.10.

BUILDING OPERATIONS FOR JUNE

Following is a list of contracts awarded published by the F. M. Dodge Co. for New England, New York, New Jersey, Pennsylvania, Maryland, Delaware, District of Columbia, Virginia, Ohio, West Virginia, Illinois, Indiana, Iowa, Wisconsin, Michigan, Minnesota, North and South Dakota, and portions of Missouri and eastern Kansas from Jan. 1 to July 1:

From January 1 to July 1:

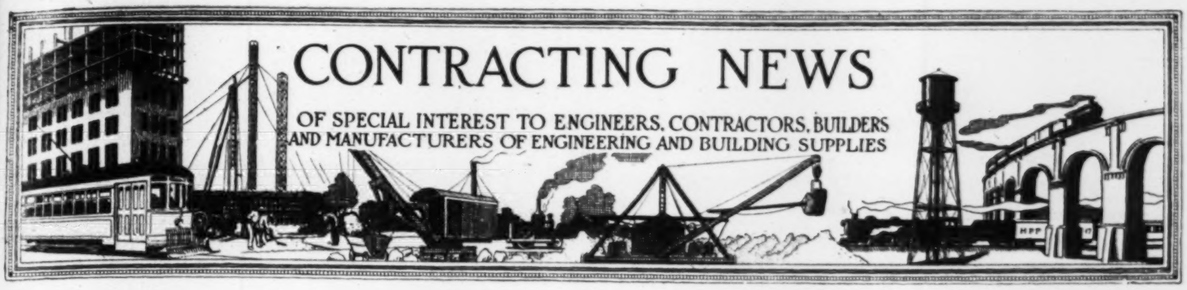
1017	$831,402,000
1916	596,583,586
1915	413,532,600
1914	382,532,000
1913	472,372,500
1912	406,011,000
1911	416,227,813
1910	454,145,798

NEW YORK AND NORTHERN NEW JERSEY

January 1 to July 1:

1917	$155,281,000
1916	74,922,500
1915	72,558,000
1914	65,926,000
1913	158,017,500
1912	122,328,000
1911	129,784,000
1910	144,918,000

For the larger territory covered contracts awarded amounted to $206,541,000 against $157,563,000 for May and $148,513,000 for April, an increase over May of $49,000,000. For the smaller territories in New York and the northern part of New Jersey, the contracts awarded amounted to $27,387,000 as against $32,419,000 in May and $26,823 in April, showing very little change.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 52 to 57 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
July 25.	Waverly, Ia.	July 12
Sept. 11.	New York, N. Y.	July 12

SEWERS

July 21.	Hagerstown, Md.	July 12
July 23.	Wingdale, N. Y.	June 28
	Adv. June 28 to July 12.	
July 23.	Canton, O.	July 19
July 24.	Crosby, Minn.	July 12
July 24.	New Brunswick, N. J.	July 19
July 25.	Orange, Conn.	July 19
	Adv. July 19.	
July 25.	Lebanon, Pa.	July 19
	Adv. July 19.	
July 30.	Mukwonago, Wis.	July 19
July 31.	Linndale, O.	July 5
July 31.	Glenwood, Minn.	July 12
Aug. 1.	Atwater, Minn.	July 12
Aug. 1.	Hazeltown, Md.	July 12
Aug. 1.	Chicago, Ill.	July 19
Aug. 6.	Cleveland Heights, O.	July 19

STRUCTURAL STEEL WORK

July 25.	Warren, O.	July 12
July 27.	Eufaula, Okla.	July 19
July 30.	New York, N. Y.	July 12
July 31.	Norwalk, O.	July 19
July 31.	Seattle, Wash.	July 19
Aug. 2.	Miami, Fla.	June 28
	Adv. June 28 and July 5.	
Aug. 2.	Little Falls, Minn.	July 19
Aug. 3.	Albany, N. Y.	July 19
	Adv. July 19.	
Aug. 6.	Spencer, Ind.	July 19
Aug. 14.	Brazil, Ind.	July 12
Aug. 16.	Hamlin, W. Va.	July 12

REINFORCED CONCRETE

July 23.	Newton, N. J.	July 19
July 23.	Junction City, Kan.	July 19
July 25.	Carroll, Ia.	July 19
July 25.	Tehamah, Neb.	July 19
July 27.	Somerville, N. J.	July 12
July 28.	Sullivan, Ind.	July 12
July 30.	Watsontown, Pa.	July 5
Aug. 3.	Athens, Tenn.	July 19
Aug. 6.	Greenville, Miss.	July 12
Aug. 6.	Columbus, O.	July 19
Aug. 13.	Spencer, W. Va.	July 19
Aug. 22.	Beatrice, Neb.	July 19

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 21.	Wauseon, O.	July 5
July 23.	Indiana	July 12
July 23.	Eastwood, N. Y.	July 19
	Adv. July 19.	
July 23.	Columbus, O.	July 19
July 23.	New York, N. Y.	July 19
July 23.	Louisiana	July 19
July 24.	Pennsylvania	July 12
July 24.	Pennsylvania	June 28
July 24.	Pottstown, Pa.	July 12
July 24.	Letcher, Ky.	July 19
July 24.	Michigan City, Ind.	July 19
July 24.	Massachusetts	July 19
July 24.	North Bergen, N. J.	July 19
July 25.	Warsaw, Ind.	July 12
July 25.	Indiana	July 12
July 25.	Idaho	July 5
July 25.	Sidney, O.	July 19
	Adv. July 19.	
July 25.	Cleveland, O.	July 19
July 25.	Huntington, W. Va.	July 19
July 26.	Little Rock, Ark.	July 19
July 26.	Newark, N. J.	July 19
July 26.	East Liverpool, O.	July 19
July 26.	Brooklyn, N. Y.	July 19
July 26.	New York, N. Y.	July 19
July 26.	Bronx, N. Y.	July 19
July 27.	Cincinnati, O.	July 19
July 27.	Ceredo, W. Va.	July 19
July 27.	West Frankfort, Ill.	July 19
July 28.	Somerset, Pa.	July 19
July 30.	Albany, N. Y.	July 19
	Adv. July 19.	
July 30.	Jefferson, O.	July 19
July 30.	Seattle, Wash.	July 19
Aug. 2.	Uniontown, Pa.	July 19
Aug. 3.	Greenville, Miss.	July 19
Aug. 3.	Indianapolis, Ind.	July 19
Aug. 6.	Clifton, Ariz.	July 12
Aug. 6.	Indianapolis, Ind.	July 12
Aug. 7.	Indiana	July 12
Aug. 7.	Houston, Tex.	July 19
Aug. 7.	Huntsville, Tex.	July 19
Aug. 7.	Pennsylvania	July 19
Aug. 8.	Santa Ana, Cal.	July 19
Aug. 13.	Lewiston, Idaho	May 24
Aug. 14.	New Bedford, N. J.	July 19
Aug. 16.	Hamlin, W. Va.	July 12

INDUSTRIAL WORKS

July 25.	Brooklyn, N. Y.	July 12
Aug. 1.	St. Petersburg, Fla.	July 5

EXCAVATION AND DREDGING

July 21.	Cadiz, O.	July 19
July 23.	Marshall, Minn.	July 12
July 23.	White Plains, N. Y.	July 19
July 23.	Mason City, Ia.	July 19
July 24.	Slayton, Minn.	July 5
July 24.	Troy, Ala.	July 19
July 25.	Dyersburg, Tenn.	July 12
July 26.	Brownstown, Ind.	July 19
July 26.	Lawrenceville, Ill.	July 19
July 27.	Detroit, Mich.	July 5
July 30.	Walker, Minn.	July 12
July 30.	Winamac, Ind.	July 19
July 31.	Susanville, Cal.	July 12
July 31.	Central Islip, N. Y.	July 19
	Adv. July 19.	
Aug. 1.	Sac City, Ia.	July 12
Aug. 3.	Lebanon, O.	July 19

BUILDINGS

July 21.	Greencastle, Ind.	July 12
July 21.	Jacksonville, Fla.	July 12
July 21.	Martins Ferry, O.	July 5
July 21.	Livingston, Mont.	July 5
July 23.	Hoisington, Kan.	July 12
July 23.	Columbus Jct., Ia.	June 28
July 24.	Crosby, Minn.	July 12
July 24.	Hutchinson, Kan.	July 19
July 25.	Barksdale, Wis.	July 19
July 25.	McPherson, Kan.	July 19
July 30.	Ft. Wayne, Ind.	June 28
July 31.	Ft. Wayne, Ind.	July 5
Aug. 1.	Stillwater, Okla.	July 12
Aug. 1.	Ft. Wayne, Ind.	July 12
Aug. 1.	Cushing, Okla.	July 19
Aug. 1.	Warroad, Minn.	July 19
Aug. 6.	Cheyenne, Wyo.	July 19
Aug. 6.	Santa Barbara, Cal.	July 19
Aug. 8.	Great Bend, Kan.	July 19
Aug. 20.	Troy, N. Y.	July 12

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
July 20.	Ft. Fairfield, Me.	June 21
July 21.	St. Louis, Mo.	July 12
July 23.	Wash., D. C.	July 19
July 30.	Phila., Pa.	July 19
July 30.	St. Louis, Mo.	July 19
July 31.	Key West, Fla.	July 19
Aug. 9.	Louisville, Ky.	July 19
	Adv. July 19.	
Aug. 17.	Lancaster, Ky.	July 19
Aug. 21.	Eldorado, Kan.	July 19
Aug. 22.	Cherokee, Ia.	July 19
July 23.	Cincinnati, O.	June 28
	Adv. June 21 to July 12.	
July 25.	Cherokee, Okla.	July 5
July 25.	Mare Island (Vallejo P. O.), Cal.	July 12
July 25.	Puget Sound (Bremerton P. O.), Wash.	July 12
July 26.	Key West, Fla.	July 12
July 26.	Gallatin, Tenn.	June 28
	Adv. June 21 and 28.	
July 27.	Vernon, Tex.	June 28
July 30.	New York, N. Y.	July 12
July 30.	Keyport, Wash.	July 12
July 30.	San Antonio, Tex.	July 12
July 30.	Newport, R. I.	July 12
July 31.	Chardon, Neb.	July 5
Aug. 3.	Winchester, Mass.	July 5
Aug. 6.	Globe, Ariz.	July 5
Aug. 14.	West Point, Ga.	July 12
Aug. 17.	Wash., D. C.	July 12

MISCELLANEOUS

Aug. 22.	Tunnels—San Francisco, Cal.	July 19
	Adv. July 19.	

Where name of official is not given, inquiries should be addressed to City Clerk' County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. J., New Brunswick—Bd. Pub. Utilities authorizes Middlesex Water Co., to issue $200,000 bonds for extending water system.

La., Alexandria—City voted $10,000 bonds for installing water-works.

Pa., Harrisburg—City plans installing larger pipe lines, new pumping unit at water-works and increasing capacity reservoir. S. F. Dunkle, supt.

O., Dayton—(Official)—City to sell, Aug. 3, $390,000 bonds for enlarging and improving water-works. H. E. Wall, city accountant.

Minn., Duluth—City soon receives bids, 900 tons c.i. pipe. About $58,000. D. A. Reed, mgr.

Okla., Lawton—City election July 23, to vote on $375,000 bond issue to improve water-works. R. H. Warren, chn. bd. comrs.

Okla., Rocky—City voted $15,000 bonds to improve water-works. Noted June 28.

Water-Works (Continued)

N. B., Edmunston—Town plans additions to aqueduct, sewage plant and electric system. About $75,000.

BIDS DESIRED

Kan., Junction City—See "Reinforced Concrete."

PRICES AND CONTRACTS AWARDED

N. Y., New York—(Official)—City received low bids Contr. No. 184, paving vitr. brick Kensico Aerator from H. E. Fox Constr. Co., 81 East 125th St., $42,850; and Lupfer & Remick, Ellicott Sq., Buffalo, $58,890. Noted June 21.

N. Y., New York—(Official)—City received low bid, Contr. 187, fitting up chemical and bacteriological laboratory, etc., lower gate chamber Ashoken Reservoir, Olive, from Lord Electric Co., 105 West 40th St., $14,839. Noted June 21.

N. Y. New York—(Official)—Bd. Water Supply received only bid Contr. 179, surfacing with vitr. brick block about 2000 ft. highways, Kensico Dam, North Castle, from Empire Eng. Co., 6 Church St., $39,695.

O., Cincinnati—City let contract 1200 tons sulphate iron for water-works to American Steel and Wire Co., 1005 Union Trade Bldg., $19,440.

★Ill., Maywood—Village let contract drilling artesian well to S. B. Geiger, 37 Van Buren St., Chicago, $135,500.

Wis., Shawano—(Official)—Electric Light & Water Comn. let contract furnishing high pressure non-condensing heavy duty Corliss engine and 3 motor-driven centrifugal pumps to Allis-Chalmers Co., West Allis. Noted June 28.

Mont., Helena—City sold $225,000 bond issue for installing water system. L. Working, mayor. Noted Apr. 19.

Okla., Lawton—City election, July 23, to vote on $375,000 to improve and extend water system: plans include 2nd pipe line from dam to Ft. Sill. R. H. Warren, chn. bd. comrs.

Cal., Calipatria—North End Water Co. plans to enlarge its dam. About $75,000. E. M. Davis, pres.

★Que., Pointe Claire—(Official)—City let contract water filtration plant and lift pumps to Arsenault & Plamondon, 70 St. James St., Montreal, $38,500. Noted June 21.

★Que., St. Johns—City let contract constructing filter, water tank and replacing some of the mains to Lanrin & Leitch, 5 Beaver Hall Sq., Montreal, $195,975.

★Que., Thetford Mines—Town let contract dam and reservoir to W. C. Goff, $10,000.

SEWERS

Proposed Work

N. J., Camden—Council passed ordinances for constructing sewers in 22nd, 32nd, Fremont, Alberta, Carmon and 34th Sts. and Westfield Ave. W. D. Brown, city clk.

N. J., Kenilworth—Boro. election soon to vote on $25,000 bond issue for sewer and road improvements. Address A. H. Letzler.

N. J., Paterson—City plans sewers in East 22nd, East 5th, and other streets. H. J. Hardes, city engr.

Pa., Pittsburgh—Council authorized constructing sewer in portion Maurice and Fleetwood Sts. J. Swan, Jr., city engr.

O., Youngstown—City received no bids installing sewers in Alberta and Jones Sts. About $50,000. Noted June 28.

Mich., Detroit—City soon lets contract constructing new sewerage system. About $4,000,000. A. Hubbell, city engr.

Kan., McPherson—City plans to install 2 sewage disposal plants. About $43,000.

Ark., Texarkana—City election, Aug. 7, to vote on $100,000 bond issue to extend and improve sewerage system. Address City Clk.

Okla., Frederick—City voted $35,000 bonds to construct sewers and street intersections. W. D. Womack, clk. Noted June 28.

Tex., San Antonio—City plans sewage pumping plant to provide Camp Wilson with sewer facilities. About $25,000. A. C. Pancoast, city engr.

Ariz., Jerome—City having plans prepared by Olmstead & Gillelen, engrs., Hollingsworth Bldg., Los Angeles, for sewerage system. T. Macleod, city engr.

Cal., Corcoran—City council having plans prepared for sewerage system to consist of 6- to 14-in. vitr. pipe sewers in every street and septic tank on 20 acre site south city.

BIDS DESIRED

Conn., Orange—(Official)—Until July 25, by Bd. Selectmen, installing 6 mi. sewers, sewage disposal works, pumping station, etc. J. Wilkinson, 1st selectman; advertised in this issue. Plans and specifications on file at this office.

N. J., New Brunswick—Until July 24, by City Comn., constructing vitr. pipe sewers in Rutgers, Delevan and other streets. A. Atkinson, city engr. Noted June 28.

Pa., Lebanon—(Official)—Until July 25, by Mayor and Council, building Contract No. 2 Lebanon's Flood Prevention Project; advertised in this issue.

O., Cleveland Heights—(Warrensville P. O.)—(Official)—Until Aug. 6, by H. H. Canfield, clk., installing brick, segment block and vitr. pipe storm sewer. F. A. Pease Eng. Co., 812 Marshall Bldg., Cleveland, engrs.

Ill., Chicago—(Official)—Until Aug. 1, by Bd. Local Improv., for sanitary sewerage system including septic tank and sand filters; about 7000-ft. 8- and 12-in. pipe sewer, 74 brick manholes, 10 flush tanks and sewage treatment plant, etc. J. Ericson, city engr. Noted June 28.

Wis., Mukwonago—(Official)—Until July 30, by W. G. Skewes, village clk., furnishing and laying 2078 ft. of 12-in., 4312 ft. 10-in. and 246 ft. of 8-in. vitr. pipe sewers, together with manholes, lampholes, flush tank and bulkhead. W. C. Kirchoffer, 31 Vroman Bldg., Madison, engr.

PRICES AND CONTRACTS AWARDED

★N. Y., Buffalo—City let contract building sewer to take care sewage from Albany outlet to Great Lakes Dredge and Dock Co., Morgan Bldg., $80,000.

★N. Y., Scarsdale—Village let contract sewers and appurtenances to J. Cuozzo, 179 Linden St., Yonkers. About $25,319. Noted June 28.

★N. J., Newark—(Official)—Passaic Valley Sewerage Comrs. let contract outfall pressure tunnel under Jersey City, to C. A. Haskin, 16 City Sq., Boston, $1,900,000,000. Noted July 5.

★Ky., Louisville—City let contract constructing sewer for cantonment near Audubon Park to G. M. Eady Co. and K. E. Barker, Brook St. between A. and Lee St. About $70,000.

★Ia., Ankeny—City let contract installing sewers to Empire Constr. Co., 203 Flynn Blk., Des Moines, $31,270.

★Wyo., Casper—City let contract sewerage system to Security Bridge Co., Billings, Mont., $117,430. Noted July 5.

★Tex., Graham—(Official)—H. E. Elrod, engr., Interurban Bldg., Dallas,, let contract sewerage system and sewage disposal plant here to Winslett-Eldridge Co., 101 Main St., Dallas.

Wash., Spokane—See 'Streets and Roads."

STRUCTURAL STEEL WORK

Proposed Work

N. J., Bloomingdale—Bd. Freeholders of Passaic and Morris Cos. plan new bridge on Paterson-Hamburgh Turnpike. Address Co. Clk., Paterson.

N. J., Camden—New Jersey Bridge and Tunnel Comn. had plans prepared by Waddell & Son, engrs., 165 Broadway, New York City, for 1745-ft. suspension bridge over Delaware River between Cooper St., Camden and Arch St., Phila. About $8,000,000.

N. J., Elizabeth—Bd. Freeholders plan election to vote on $97,000 bonds to build new bridges.

W. Va., Parkersburg—Baltimore & Ohio R.R. plans to rebuild bridge over Little Kanawha River. R. N. Begien, Baltimore, ch. engr.

Ga., Savannah—M. B. Lane, pres. Citizens & Southern Bank organizing company to build bridge over Altamaha River.

Fla., Jacksonville—County voted $950,000 bonds to build bridge over St. Johns River to connect Jacksonville and South Jacksonville. Noted June 7.

O., Ironton—County plans to build Mill St. bridge over Neshahannock Creek, 54 ft. wide. About $66,000. Mahoning Valley Ry. and New Castle Electric Street Ry. (controlled by Mahoning & Shenango Ry. and Light Co.), Youngstown, will pay $19,000 toward cost. R. Sullivan, mgr.

O., Youngstown—Youngstown Sheet and Tube Co., Stambaugh Bldg., plans to rebuild bridge recently destroyed by tornado, 100-ft. high, 327 ft. long.

Ill., East Dundee — (Dundee P. O.)— County prepared for Main St. bridge 240 ft. long, 60 ft. wide. Bonds voted for work. G. N. Lamb, Geneva, co. supt. highways.

Ia., Marshalltown—City preparing plans for bridge over lagoon, 74 ft. long, 8 ft. wide. A. O. Rosengren, clk.

Montana—State Highway Comn., Helena, plans to build 12 bridges on State Highway in Mineral, Musselshell, Dawson, Beaverhead, Sheridan and Deer Lodge Cos. About $200,000.

Ark., Osceola—County appropriated $15,000 to build bridge over Big Lake.

Washington—See "Streets and Roads."

Wash., Tacoma—Co. Comrs. rejected bids building Bridge No. 26213A, over Hylebos Creek waterway on Lincoln Ave., Strauss trunnion bascule or Scherzer Rolling lift bridge, trestle approaches, piers and fenders as too high. New bids. Noted June 21.

Ont., Sarnia—Mueller Brass Co. having plans prepared for new steel rolling mills. About $200,000.

BIDS DESIRED

N. Y., Albany—(Official)—Until Aug. 3 by W. W. Wotherspoon, supt. pub. wks., building highway bridge over Rood Creek; advertised in this issue.

Pa., Somerset—See "Streets and Roads."

Ind., Spencer—Until Aug. 6, by Co. Comrs., building 3 steel bridges, also 94 "I" beams, bids to be submitted by pounds. S. M. Royer, aud.

O., Norwalk—Until July 31, by C. E. Bloomer, clk. co. comrs. building bridges in Wakeman, Norwalk and Fairfield Twps., also on Town Line Rd. between Fairfield and Ripley Twps.

Minn., Little Falls—Until Aug. 2, by County, building state bridge No. 2726, two 120-ft. steel truss spans, one 23-ft. steel beam span, rein.-con. with wooden superstructure. B. Y. McNairy, co. aud.

Okla., Eufaula—Until July 27, by Jefferson Highway Bridge Co., building bridge over Canadian River, 3160 ft. long, involving 1300 ft. channel spans, 1000 ft. timber approach, 860-ft. embankments. Harrington, Howard & Ash., Orear-Leslie Bldg., Kansas City, Mo., engrs.

Wash., Seattle—Until July 31, by Co. Comrs., rebuilding bridge over Stuck River near Pacific City. S. J. Humes, co. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ala., Birmingham — Southern Ry. let contract 21st St. viaduct to T. Worthington, 1st Natl. Bank Bldg., $180,000.

★Ky., Dawson Springs—See "Railways."

★O., Painesville—See "Streets and Roads."

★Ia., Albia—Bd. Supervs. let contract building bridges and culverts to Ottumwa Supply & Constr. Co., Ottumwa, $12,010; J. A. Lafferty, Eddyville, $7080.

★Ia., Emmetsburg—Bd. Supervs. let contract building bridges and culverts to Iowa Bridge Co., Hubbell Bldg., Des Moines, $6167; Des Moines Bridge & Iron Works, 9th and 11th Aves., Des Moines, $8900.

★Ia., Pocahontas—Bd. Supervs. let contract building bridges and culverts to Iowa Bridge Co., Hubbell Bldg., Des Moines, $2974; Federal Bridge Co., 1122 Equitable Bldg., Des Moines, $11,647.

★Iowa, Spencer—Bd. Supervs. let contract building bridges and culverts to E. Landsmann, Everly, $21,070; J. H. Johnson, Royal, $6400; Federal Bridge Co., 1122 Equitable Bldg., Des Moines, $2709.

★S. D., Mitchell—County let contract for 13 bridges to Pioneer Bridge Co., Mitchell, $25,000.

★Man., St. Boniface—City let contract steel bridge to Dominion Bridge Co., Canada Bldg., Winnipeg, $225,000.

★Ark., Morrillton—County let contract building bridge over Arkansas River to Midland Bridge Co., 504 Ry. Ex. Bldg., Kansas City, Mo., $125,000. Noted June 7.

★Washington — (Official)—State Highway Comn., Olympia, let contract Walla Walla River bridge to C. G. Huber, Central Bldg., Seattle, $21,215.

Structural Steel Work (Continued)

★**Wash., Mt. Vernon**—Co. Comrs. let contract building concrete piers, re-timbering and rebuilding wooden spans and approaches bridge over Skagit River to J. R. Wood, 621 Valley St., Seattle, $27,900. Noted June 28.

Oregon—State Highway Dept., Salem, received low bid building inter-county bridge between Marion and Polk Co.'s from Coast Bridge Co., Ry. Ex. Bldg., Portland, $247,901. Noted June 28.

REINFORCED CONCRETE

Proposed Work

N. Y., Newton Falls—Newton Falls Paper Co. had plans prepared by C. E. Easton, archt., Sherman Blk., Watertown, for rein.-con. hydro-electric plant. About $50,000. F. L. More, pres.

N. J., Jersey City—Pennsylvania R.R. plans new rein.-con. bridges over tracks at Baldwin Summit and Chestnut Aves. About $30,000. A. C. Shand, Broad St. Sta., Phila., ch. engr.

N. J., Newark—Packard Motor Car Co. plans 4-story, 90 x 150-ft. rein.-con. showroom and garage and 1-story, 90 x 150-ft. addition at 1020-4 Broad St. E. S. Hare, Bway and 61st St., pres. W. E. Lehman, 738 Broad St., archt.

Pa., Phila.—Cunningham Piano Co., 1101 Chestnut St., plans 12-story rein.-con. factory, 1312-1314 Chestnut St. P. J. Cunningham, secy. and treas.

Pa., Pottstown—Pennsylvania R.R. plans new rein.-con. bridge over Mantawny Creek, to replace present steel span. A. C. Shand, Broad St. Station, Phila., ch. engr.

Ala., Mobile—See "Miscellaneous."

Ky., Montgomery—Louisville & Nashville R.R. plans rein.-con. bridge on Bell St. About $20,000. W. H. Courtenay, Louisville, ch. engr.

Ill., Chicago—T. Swanson, 321 Fullerton Pkway., having plans prepared by Hall & Ostergren, archts., 139 North Clark St., 7-story, rein.-con. apartment hotel at Wrightwood and Pine Grove Aves. About $525,000.

Ill., Chicago—Armour & Co., Union Stock Yards, had plans prepared for 2-story, 110x 304-ft. rein.-con. mechanical shop at West 39th St. and Packers Ave. About $70,000.

Mont., Livingston—Northern Pacific R.R. plans to build rein.-con. bridge over Shields River near Livingston. About $200,000. H. E. Stevens, 5th and Jackson Sts., St. Paul, ch. engr.

Mo., Bay St. Louis—City voted $200,000 bonds to build rein.-con. sea wall. D. U. Harris, Mobile, Ala., engr.

Wash., Seattle—Puget Sound Traction, Light & Power Co. plans to build 60x100-ft. rein.-con. oil storage tank, Greeley Ave. between 13th and 14th Ave. S., 15,000-bbl. capacity. About $30,000.

Ont., Weston—City having plans prepared by James, Loudon & Hertzberg, engrs., for rein.-con. intake crib, concrete dividing wall in sedimentation basin and lining basin with concrete.

Sask., Moose Jaw—Alberta Pacific Grain Co. preparing plans new rein.-con. grain elevator. About $75,000.

BIDS DESIRED

N. J., Newton—Until July 23, by Bd. Freeholders, building rein.-con. bridge over Paulin's Kill. H. Snook, co. engr.

W. Va., Spencer—Until Aug. 13, by County building rein.-con. bridges as follows: Lowe, Lawrence, Nancy's Run, Mile 3, Gandeeville, Wolf branch, Walton, Gibson, Crawford and Clover bridges, also steel bridge over West Fork at Rocksdale. W. A. Carpenter, clk.

Tenn., Athens—Until Aug. 3, by Co. Rd. Comrs., building 3 rein.-con. bridges. J. P. Firestone, superv.-secy.

O., Columbus—(Official)—Until Aug. 6, by Co. Comrs., building rein.-con. bridges over Olentangy River at Lane and 3rd Aves., Clinton and Franklin Twps. J. Scott, clk.

Ia., Carroll—Until July 25, by County, building 2 rein.-con. bridges. C. Wright, co. engr.

Kan., Junction City—(Official)—Until July 23, by G. W. Dorn, city clk., for concrete reservoir. About $15,000. Noted June 14 under "Water-Works."

Neb., Beatrice—Until Aug. 22, by County for rein.-con. bridge. E. M. Burnham, clk.

Neb., Tehamah—Until July 25, by City, building highway bridge and retaining walls. M. S. McGrew, clk. A. C. Arend, Brandies Bldg., Omaha, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Long Island City**—New York Telephone Co., 15 Dey St., New York City, let contract 3-story, 50 x 75-ft. and 1--story, 75 x 150-ft. rein.con. garage on Pomeroy St. and 8th and Pierce Aves., to A. J. Robinson Co., 123 East 23rd St., New York City. About $50,000.

★**N. J., Rahway**—Bd. Freeholders let contract rein.-con. bridge, West Grand St. to A. E. Smith, Westfield, $18,944. Noted June 28.

★**Pa., Oreland**—Philadelphia & Reading R.R. let contract 2-span rein.-con. bridge near Oreland to F. H. Leonard, Wayne.

★**Pa., Phila.**—De Long Hook & Eye Co., Broad and Wallace Sts., let contract 4-story rein.-con. factory, 21st and Clearfield Sts., to W. Steele & Sons Co., 34 South 15th St., $180,000.

★**W. Va., Clarksburg**—County let contract rein.-con. bridge over Elk Creek, Bridge St. to Luten Bridge Co., West Market St., York, Pa., $16,000. Noted June 14.

★**S. D., Wessington Springs**—High School—Bd. Educ. let contract 2-story, 91 x 105-ft. rein.-con., to F. R. Comb Co., 201 Lumber Ex., Minneapolis. About $57,602. Noted June 7.

★**Mo., St. Joseph**—Buchanan Elevator Co. let contract 16 rein.-con. tanks to Lehr Constr. Co., 1712 Frederick Ave., $125,000.

★**Okla., Tulsa**—Oklahoma Union Ry. let contract rein.-con. bridges to be built on line between Tulsa and Sapulpa to Topeka Bridge and Iron Co., Topeka, Kan.

STREETS AND ROADS

Proposed Work

Mass., Boston—Bd. St. Comrs. plan resurfacing Beacon St., topeka, bitulithic or filbertine. E. F. Murphy, comr. pub. wks.

Mass., Springfield—City plans $1,500,000 bond issue to widen Dwight St. F. H. Clark, city engr.

R. I., Newport—City plans election to vote on $35,000 bond issue for improving Bath Rd. R. J. Easton, city engr.

N. Y., Buffalo—Bd. Pub. Wks. plan to pave Spencer, Carolina, Milton, Erie, Genessee and Terrace Sts., Michigan Ave. and Broadway. G. H. Norton, city engr.

N. Y., Geneseo—Village voted $12,000 bonds for improving portion Court St.

N. Y., Rochester—City plans to pave Marigold St., about $5000; Goodman St., $35,000, grading, walks and sewers on Alberta St., $4800; Wilton Terrace, $8000. F. O. Elwood, city engr.

N. J., Bayonne—Boulevard Comrs., Jersey City, having plans prepared improving portion Boulevard. T. J. Wasser, co. engr.

N. J., Butler—Bd. Freeholders, Morristown, soon lets contract paving Boonton Ave., concrete.

N. J., Collingswood—City plans election to vote on $121,000 bond issue for repaving Haddon Ave. and other streets.

N. J., East Orange—City passed ordinance to repave portion of Springdale Ave., wood block, asphalt or granite block on 6-in. concrete base. W. D. Willegerod, city engr.

N. J., Jersey City—City soon lets contract repaving Central Ave., asphalt. About $20,000. C. A. Van Kuren, city engr.

N. J., Kenilworth—See "Sewers."

N. J., Metuchen—Bd. Freeholders, New Brunswick, plan to pave road from Metuchen to Plainfield, bituminous concrete. About $76,000.

N. J., Newark—Bd. St. and Water Comrs. plan repaving North Canal St., oblong granite block pavement 6-in. concrete foundation and resurfacing Wummer Ave., asphalt. M. R. Sherred, ch. eng.

N. J., Union—City Council plans repaving Hudson, New York, Palisade and Park Aves. About $25,000. T. F. Bowe, city engr.

Pennsylvania—State Highway Comn., Harrisburg, rejected bids for Clarion Co. road. New bids. Noted May 17.

Pennsylvania—State Highway Comn., Harrisburg, rejected bids building 1270-ft. Oberlin Rd., vitr. brick. New bids. Noted June 21.

Pa., Harrisburg—Senate passed bill appropriating $12,215,000 for public roads. This with $6,000,000 estimated revenue from automobile licenses dedicated to good roads, makes total of more than $18,500,000 appropriated by the legislature for road work for next 2 years.

Pa., Harrisburg—Council passed ordinance to pave Brensinger St. and Sprague Alley, asphalt, concrete base. M. B. Cowden, city engr.

Pa., Meyersdale—Boro. voted $14,000 to pave streets and $6000 to extend sewers. Noted June 28.

Pa., Northampton Heights—Boro. council authorized sale of $40,000 bonds for improving streets.

Pa., Schuylkill Haven—(Official)—Boro. postponed for 1 year paving and curbing 10,000 sq.yd. Canal, Main and St. John Sts., brick and concrete. G. W. Butz, 205 Centre Ave., boro. engr. Noted June 28.

Pa., Scranton—City soon lets contract paving, grading, curbing portion Wheeler Ave. and Front St., sheet asphalt, concrete base, cost, $12,600 and $5250 respectively; Gibson St., sheet asphalt and stone block, concrete base, $10,278. W. Schunk, city engr.

Pa., Washington—(Official)—County soon lets contract resurfacing 4800 ft. Taylorston Rd. and 1 mi. Burgettstown-South Rd. T. J. Underwood, controller. Noted June 28.

Delaware—State Highway Dept., Dover, making surveys for new Lincoln Highway from Pennsylvania to Maryland state lines, via Newark, Dover, New Castle, Smyrna, etc. Legislature appropriated $500,000 for project.

S. C., Spartanburg—County plans improving Howard Gap, Mills Gap, Chesnee, Goodjoin. Spartanburg, Glenn Springs, Pacolet, Walnut Grove and Buncomb Rd., also Natl. Highway.

Miss., Greenwood—Bd. Superv. cancelled contract let to Kane-Kelly Constr. Co., New Orleans, at $300,000, and will readvertise for bids. Noted May 31.

Miss., Gulfport—City Comrs. passed ordinance to build 7 mi. concrete sidewalks. About $50,000. J. W. Rankin, city engr.

Louisiana—State Highway Comn., New Orleans, plans to build New Orleans-Tangipanoa Highway. D. Buie, engr.

Louisiana—Bd. State Engrs. prepared plans 52-mi. highway from Gretna to Ft. St. Phillips. D. Buie, state engr.

Tenn., Knoxville—City soon lets contract paving sections McKee St., Hannah, Highland and Winona Aves. J. B. McCalla, city engr.

Tenn., Sevierville—County defeated $268,000 bond issue, June 21, to build roads. Noted Apr. 19.

Tenn., Sneedville—County voted $100,000 bonds to improve highways.

O., Cleveland—County plans to improve Highland Rd., Euclid Twp., Bagley Rd., Elm and Main Sts., Linndale Rd., Brooklyn Twp., also Broadway and Cedar Rds. W. A. Stinchcomb, co. engr.

O., Cleveland—City council plans $280,000 bond issue to improve streets. R. Hoffman, city engr.

O., Cleveland—City plans to improve and pave portions of Aetna, Glenview, East 110th, East 119th, East 69th and West 97th Sts. R. Hoffman, city engr.

O., East Liverpool—Bd. Control rejected bids for improving Pennsylvania and Harvey Aves. and Elizabeth St. Noted July 12.

O., Findlay—County sold $24,000 bonds to pave Ebersole, Smith, Fisher, Huston, Ewing and Bosserman Rd. Noted May 31.

O., London—(Official)—City postponed election from July 2 to Aug. 14 to vote on $45,000 bonds to pave various streets. McCafferty & Clark, city engrs. Noted June 28.

O., Sandusky—City plans paving East 9th St. and Cleveland Ave. About $40,000. R. L. Wager, city engr.

O., Toledo—County plans to rebuild River Rd. from Maumee to point beyond Waterville; 18-ft. concrete roadway. About $164,000; Federal Government to appropriate $82,000 toward cost.

O., Warren—Council passed ordinance to widen Quinby Ave. and extend Paige Ave. C. Lawrence, city engr.

O., Youngstown—City plans paving portion of Rush Blvd. F. M. Lillie, engr.

Ind., Fowler—(Official)—County received no bids grading, paving and graveling highway, Hickory Grove Twp., to be known as George O. Geary et. al. road, brick and gravel. W. Mankey, aud. Noted June 28.

Streets and Roads (Continued)

Ind., Peru—City preparing plans paving portion West 2nd St. J. Horan, city engr.

Ill., Rock Island—City plans asphalt macadam paving on Churchill and Ellsworth Sts. and Post Ave. W. Treichler, city engr. Noted Apr. 5.

Wis., Baldwin—City Council plans $40,000 bond issue for paving Main, Watertown and Harrington Sts.

Ia., Davenport—Town soon lets contract paving portion Mississippi Blvd. and 10th St.

Kan., Eldorado—Butler Co. Good Rds. Club plans building brick road 18 ft. wide between Eldorado and Douglass. About $600,000.

Kan., Wichita—City plans paving portions of Bluff St. and Central and Rutan Aves. B. Wells, city engr.

Mont., Butte—Council passed resolution to improve and pave Dist. No. 238, asphaltic concrete, bitulithic, creosoted wood block or vitr. brick. About $60,089 to $107,754.

Missouri — State Highway Comn., St. Louis, plans 5000 mi. system hard surface highways to connect 114 counties. About $5,000,000.

Mo., Benton—County election Aug. 15th to vote on $800,000 bonds for constructing good roads. Noted July 5.

Mo., Emminence—County defeated $150,000 bond issue June 30 to build roads. Noted June 14.

Mo., Harrisonville—County plans to build rock road. About $52,000.

Mo., Lathrop—County plans 6 mi. road from Lathrop to Holt. About $31,000.

Tex., Center—County election in August to vote on $600,000 bonds to build roads.

Tex., Cold Springs—County election July 26 to vote on $75,000 bonds to build roads in Rd. Dist. No. 4.

Tex., Daingerfield—County voted $10,000 bonds to build roads, Cason Precinct.

Tex., Dallas—City passed resolution to pave Cedar Springs, Oak Lawn, Englewood, College, Grand and Haines Sts., also widening portions Harwood and Masten Sts. H. Moseley, city engr.

Tex., Dallas—City soon receives bids paving portion Maple Ave., bitulithic. H. Moseley, city engr.

Tex., Greenville—County election Aug. 4 to vote on $100,000 bonds to build roads.

Tex., Sulphur Springs—County voted $12,000 bonds to build roads, Arbala and Liberty Precincts.

Tex., Uvalde—County election Aug. 11 to vote on $60,000 bonds to build roads, Comrs. Precinct No. 2.

Okla., Fallis—County voted $16,000 bond issue to build roads. Address Co. Clk., Chandler.

Okla., Frederick—See "Sewers."

Okla., Tulsa—County plans to spend about $500,000 to build roads.

Utah, Ogden—City soon lets contract improving Main St. About $125,000. J. M. Tracy, city engr.

Ariz., Douglas—City plans paving 11th and 12th Sts. About $132,000.

Washington — State Highway Comn. engrs., Olympia, making surveys highway from Stanwood to Silvana, Snohomish Co., also bridge over Stillaguamish River. About $64,000.

Wash., Seattle—Pk. Bd. plans resurfacing 2-mi. of boulevard. About $15,000. R. Cotterill, secy.

Oregon—State Highway Comn., Salem, having plans prepared 10-mi. road from Pendleton to La Grande.

Cal., Lancaster—County voted $140,000 bonds for highway between Redman and here, about 14 mi. A. M. McPherrin, clk. bd. superv.

Cal., Merced—City rejected bids for paving 300,000 sq.ft. of 4-in. and 82,000 sq.ft. of 5-in. concrete with oil and sand surface, also 37,500 lin.ft. concrete curbs, etc. New bids. Noted April 19.

Cal., San Diego—City soon lets contract building road to army cantonment at Linda Vista, about 4 mi. Work to be let in 2 sections quantities as follows: (a) 11,170 cu.yd. excavation, 10,400 cu.yd embankment, 329,344 sq.ft. 5-in. concrete pavement, 200 lin.ft. 12-in. cement pipe culverts, 8 cu. yd. concrete in head walls, (b) 18,215 cu.yd. excavation, 12,100 cu.yd. embankment, 134,905 sq.ft. 5-in. concrete pavement, 400 lin.ft. 12- to 24-in. concrete pipe culverts, 6 cu.yd. concrete in headwalls. G. Cromwell, engr.

BIDS DESIRED

Massachusetts—(Official)—Until July 24 by State Highway Comn., Boston building 14,600 ft. state highway, Egremont and Sheffield Twps.; 14,600 ft., Worcester and West Royalston Twp. W. D. Sohier, comr.

N. Y., Albany—(Official)—Until July 30, by State Highway Comn., 55 Lancaster St., building highways various counties. E. Duffey, comr.; advertised in this issue.

N. Y., Bronx—Until July 26, by D. Mathewson, boro. pres., repaving portion roadway St. Ann's Ave., sheet asphalt and redressed granite blocks, concrete foundation; Stebbins Ave. and White Plains Rd., sheet asphalt, concrete foundation; Sedgwick Ave., granite block, sand foundation; Fieldston Rd., Tremont Ave., East 228th St., Boston Rd., waterbound macadam; East 184th St., Morris Ave., bituminous concrete, cement concrete foundation; Leggett Ave., second hand granite blocks, sand foundation; also sewers in portions Barry and Worthen St.

N. Y., Brooklyn—Until July 26, by W. Williams, comr. Water Supply, Gas and Electricity, Municipal Bldg., Manhattan, paving roadway, furnishing new fence posts and resetting fence in front of Mt. Prospect Laboratory, Flatbush Ave., near Eastern Pkway.

N. Y., Eastwood—(Official)—Until July 23, by Bd. Trustees for grading and macadamizing portion Blust St. L. B. Smith, clk.; advertised in this issue.

N. Y., New York—Until July 23, by M. M. Marks, boro. pres. regulating and paving roadway of West 172nd St. from Bway. to Ft. Washington Ave., also portion Houston St., sheet asphalt, concrete foundation; roadway of West 172nd St., from Ft. Washington Ave. to Haven Ave., bituminous concrete, concrete foundation.

N. Y., New York—Until July 26, by Park Bd., Municipal Bldg., for regulating, grading, paving with concrete pavement roadway on Washington Ave. across Jacob Riis Park (Queens Boro.)

N. J., Newark—Until July 26, by Bd. St. and Water Comrs., paving portions Dassing, Isabelle and Parkhurst Aves., bitulithic on 6-in. concrete base. M. R. Sherrard, chief engr. Noted June 7.

N. J., Newark—Until July 26, by Bd. St. & Water Comrs., grading, curbing and flagging Hamburg Pl. and paving East Peddie St., also repaving South 11th St.; about 9200 sq.yd. asphalt pavement on 6-in. concrete base. M. R. Sherrard, city engr. Noted June 28.

N. J., North Bergen—Until July 24 by Co Park Comn., Jersey City, paving road at North Hudson Park, asphalt block or bituminous concrete. W. G. Muirheid, secy.

Pennsylvania—(Official)—Until Aug. 7 by State Highway Comn., Harrisburg, building improved highways, Cambria, Allegheny, Washington, Lehigh, Butler, Lackawanna, Luzerne and Dauphin Cos.

Pa., Somerset—(Official)—Until July 28, by Co. Comrs., grading, draining and bridging County Rd. from Brotherton to Berlin. W. J. Glessner, comr.

Pa., Uniontown—Until Aug. 3 by H. Kisinger, co. controller, for Fairbanks-New Salem Rd., Menallen Twp. and Connellsville-Pennsville Rd., Bullskin Twp.

W. Va., Ceredo—Until July 27, by City Recdr., paving B and Main Sts., brick on concrete foundation, concrete curb and gutter. About $23,000. F. W. Gesling, Ashland, Ky., engr.

W. Va., Huntington — (Official) — Until July 25, by Bd. Comrs. grading, curbing and paving portions of 5th and 6th Sts. B. Maupin, city engr.

Miss., Greenville—(Official)—Until Aug. 3, by Co. Highway Comrs. for grading highway from Arcola to Sunflower River. O. C. Kulicka, asst. engr.

Louisiana—(Official)—Until July 23 Bd. State Engrs., New Orleans, building 6-mi. Sect. 4, Arkansas Highway, Caddo Co.; 16.9-mi. Alexandria-Echo Sect. Alexandria-Marksville Highway, Rapides Co. D. Buie, state engr.

O., Cincinnati—(Official)—Until July 27, by Co. Comrs., repairing portions of Church St. bituminous macadam. F. E. Wesselmann, pres.

O., Cleveland—Until July 25, by City, grading, curbing and paving portions of Arney, Sauer, East 141st and Fairmont Sts. and approaches of Clark Ave. viaduct. R. Hoffman, city engr.

O., Columbus—Until July 21, by J. Scott, co. clk., surfacing portions Reynoldsburg & New Albany Road.

O., East Liverpool—(Official)—Until July 26, by T. Doherty, dir. pub. serv., for paving Penn Ave., Elizabeth and Harvey Sts. J. C. Kelly, city engr.

O., Jefferson—(Official)—Until July 30, by Co. Comrs., building Williamsport Rd. No. 1. B. E. Brainard, clk.

O., Sidney—(Official)—Until July [illegible], by C. B. Deweese, dir. pub. ser., paving 95,000-sq.yd. streets, vitr. brick, asphalt, asphaltic concrete, bitulithic and wood block; advertised in this issue.

Ind., Indianapolis—(Official)—Until Aug. 3, by Bd. Pub. Wks., improving portion Newman and Denny Sts., Central and Sheffield Aves. B. J. T. Jeup, city engr.

Ind., Indianapolis—(Official)—Until Aug. 6, by Bd. Pub. Wks., improving portion Julian Ave., Oriental, Station and Walnut Sts. B. J. T. Jeup, city engr.

Ind., Michigan City—Until July [illegible], by Bd. Pub. Wks., paving portion 11th St. E. G. Dunn, city engr.

Ill., West Frankfort—(Official)—Until July 27, by Co. Clk., 10 concrete highways, 33,500 sq.yd. pavement and necessary bridges. Putnam & Mautz, Benton, engrs. Noted Apr. 19.

Arkansas—Until July 26, by State Highway Comn., Little Rock, for constructing 8-mi. concrete and 14 mi. gravel road, with bituminous carpet cover.

Tex., Huntsville—(Official)—Until Aug. 7 by T. E. Humphrey, mayor, paving 15,000 yd. street.

Wash., Seattle—Until July 30 by Co. Comrs. building 5-mi. Cascade Scenic Highway. About $45,000 to $50,000. S. J. Humes, co. engr.

Cal., Santa Ana—Until Aug .8 by Bd. Supervs. building and grading ½-mi. Sect. 3, Irvine Blvd., concrete. W. B. Williams, clk.

Cal., Santa Ana—Until Aug. 8, by W. B. Williams, co. clk., grading Sect. 2 Brea-Olinda Road, 1.53 mi. J. L. McBride, co. surv.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts—State Highway Comn., Boston, let contract asphalt macadam road, Uxbridge Twp., to R. H. Newell Co., Uxbridge, $29,801. Noted July 5.

N. Y., Brooklyn—L. H. Pounds, boro. pres., received low bids (a) regulating, curbing and paving with permanent asphalt pavement, 6-in. concrete foundation roadway Ave. J; (b) 64th St.; (c) regulating, paving and repaving with asphalt on 6-in. concrete foundation 7th Ave.; (d) center roadway 7th Ave.; from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (a) $13,805, (b) $6398, (c) $6869, (d) $63,861; Borough Asphalt Co., 1301 Metropolitan Ave., (a) $13,978, (b) $6465, (c) $6953, (d) $58,092; Uvalde Asphalt Paving Co., Metropolitan Ave., (a) $14,830, (b) $6844, (c) $7448, (d) $64,190.

N. Y., East Aurora—Bd. Supervs., Buffalo, received low bids paving 2⅜-mi. road from East Aurora to Lancaster, macadam from Meyers & Meyers, Buffalo, $30,000.

N. J., Mt. Holley—(Official)—Bd. Freeholders received low bids improving (a) Moorestown-Camden Pike, Chester Twp., (b) Johnstown Pike, Northampton, Easthampton and Springfield Twps., (c) Pemberton-Lewiston Rd., Pemberton Twp., as follows: Sutton & Corson, 739 Asbury St., Ocean City, (a) $97,339, (b) $43,059, (c) $41,817; J. M. Kelly Constr. Co., 432 Market St., Camden, (a) $114,303; C. A. Reed Co., Trenton, (b) $51,672; Eastern Paving Co., 1414 South Penn Sq., Phila., (b) $42,103; Utility Constr. Co., 46 Paterson St., New Brunswick, (c) $36,274. Noted June 28.

★N. J., Rutherford—City let contract paving Union Ave. to Union Constr. and Bldg. Co., Main St., Passaic. About $65,460. Noted June 21.

★N. J., Trenton—(Official)—Bd. Freeholders let contract building Sect. 3, River Rd., Hopewell Twp., to C. A. Reed Co., Trenton, $11,191. Noted June 28.

N. J., West New York—Town received bids July 10, paving portion Bergenline Ave., (a) asphalt block, (b) trap rock block, redressed, (c) bituminous concrete, as follows: G. J. Horning, 513 16th St., (a and b), 89½%, (c) 79½%; Curtin Bros., 45 Madison Ave., Guttenberg, (a and b) 113%, (c) 107%; Clinton Contr. Co., River Rd., Woodcliff, (a and b) 103%, (c) 89%; R. Mazzoni, 584 9th St., (a and b) 105%, (c) 93%. Noted June 28.

Streets and Roads (Continued)

★**Pa., Erie**—City let contract paving portion 28th St. to Mayer Bros. Constr. Co., Commerce Bldg. and J. Doyle; Plum St. to J. McCormick & Son.

★**Pa., Phila.**—City let contract paving Queen Park, 2nd and Catharine Sts. to G. Dobbins & Co.

★**Pa., Pittsburgh**—Co. Comrs. let contract for road work as follows: M. O'Herron Co., South 1st and McKean Sts., reconstructing Squaw Run Rd., brick, $40,310; Banksville Rd., rein.-con. and brick surfacing, $22,150 and $38,850 respectively; D. McNeil Co., Rochester Rd., asphaltic concrete, $23,677; R. Swan, Jr., Co., Jenkins Ave., Little Deer Creek Valley Rd., rein.-con., $46,667.

★**Pa., Williamsport**—Council let contract resurfacing asphalt streets to Central Constr. Co., 7th and Emerald Sts., Harrisburg, $1.32 per sq.yd.; paving portion Water and Walnut Sts., Dewey and Erie Aves., Paxton brick, to Busch & Stewart, Trust Bldg., $1.68.

★**Md., Frederick**—(Official)—County let contract building 5 mi. Lewiston-Creagerstown Rd. to L. R. Waeschex, Thurmont. About $52,000. Noted June 14.

★**Miss., Sumner**—County Comrs. let contract gravel highways to C. V. Evans, Loveman Bldg. About $200,000.

★**La., Crowley**—County let contract building 45 mi. roads to Healey Constr. Co., Meridian, Miss. About $242,826. Noted May 10.

★**O. ,Bellaire**—City let contract paving South Belmont St. to Resser & Maloney, $1.65 per sq.yd.

O., Cincinnati—(Official)—City received low bid paving playground from D. Gordon Bldg. and Constr. Co., 734 West 7th St. About $31,530.

★**O., Cleveland**—County let contract paving portion Lee Rd. to McHugh Bros., 1430 South Penn Sq., Phila.

★**O., Cleveland**—Bd. Control let contracts for following street improvements: Bentley Bros., 410 Electric Bldg., paving Lakeside Ave., N. E., $11,000; Cleveland Trinidad Paving Co., 3409 Trumbull St., East 65th St., $14,000, East 77th St., $4000, East 128th St., $12,000, Adelaide Ave., $10,800; A. M. Pejsa Paving Co., 2370 East 93rd St., Ingersoll Rd. Noted June 7.

★**O., Cleveland**—Bd. Pub. Wks. let contract paving portions St. Clair St. to R. B. Burnett, 527 Society for Savings Bldg., $161,064; Lincoln and 11th Sts., to Cleveland Trinidad Co., 420 Lakeside Ave., $35,833. Noted June 28.

★**O., Columbus**—City let contract asphalt resurfacing to Citizens Rd. Preserving Co., $40,500; tarvia repair work to Barrett Co., Ill. Bldg., Cleveland, $64,000; bitumas macadam, to Jaber Constr. Co., $10,574.

O., Coshocton—City received bids paving portion (a) 6th St., (b) Denman and Cossingham Aves., from J. Hall, (a) $15,435, (b) $22,913, Coshocton Constr. Co., Coshocton; (b) $24,871; Henderson Bros., (a) $16,713, (b) $22,021.

★**O., Defiance**—County let contract paving Okolona-Ridgeville Rd. to J. A. Westrick, Holgate. About $64,616.

★**O., Fremont**—City let contract Garvin Rd., 2.25 mi. of 16-ft. macadam, to J. Strausel, Fremont, $20,000, Artz Rd., 2.50 mi. same pavement, Barnes & Taber, Rocky Ridge, $18,000.

O., Granville—City Council received bids for paving and improving Pearl St., as follows: Keeley & Bolen, concrete curb and gutter with Lincoln block paving, $18,493; Federal Asphalt Paving Co., Trinidad, $17,112.

★**O., Jefferson**—Co. Comrs. let contract building Jefferson-Eagleville Rd. to Hart & Kemp.

★**O., Painesville**—County let contract grading and bridging 7-mi. Lincoln Highway, Madison Twp. to Campbell Bros., Stambaugh Bldg., Youngstown, $57,420.

O., Youngstown—Co. Comrs received low bids improving New Buffalo and Ribbetts Corner Rd. and Orris and Silica Quarry Rd. from L. H. Young, $14,658 and $4456, respectively.

★**Indiana**—Co. Comrs. let contracts road work as follows: Lebanon, gravel road, Jackson and Jefferson Twps., to F. Long, $14,600; Nashville, gravel road, Jackson Twp., to J. M. Fleetwood, $10,000; Goshen, gravel road, Osolo Constr. Co., Elkhart, $12,750; Albion, brick road, Northern Constr. Co., Elkhart, $52,500. Noted June 28.

Ind., Indianapolis — City received bids paving portion South St. as follows: Amer. Constr. Co., 1201 East Georgia St., 1st grade asphalt, $5.10 per lin.ft., wood block, $7.56 per lin.ft.; Columbia Constr. Co., 2nd grade brick, $5.22; Marion Co. Constr. Co., 1600 South West St., 1st grade asphalt, $5.45, wood block, $7.27; Republic Constr. Co., 1614 Merchants Bank Bldg., 1st grade asphalt, $5.60, wood block, $7.42, granite block, $7.62; Union Asphalt Constr. Co., 308 Amer. Life Bldg., 1st grade asphalt, $5.34, wood block, $7.17, granite block, $7.65; Union Stone & Material Co., 1007 Gilbert St., Cincinnati, granite block, $7.50. B. J. T. Jeup, city engr.

★**Ind., Indianapolis**—Co. Comrs. let contract concreting portion National Rd. to J. E. McNamara Constr. Co., Indianapolis, About $78,450.

★**Ind., Indianapolis**—Bd. Pub. Wks. let contract paving Newmant St., asphalt, to Union Asphalt Constr. Co., 308 Amer. Central Life Bldg., 1-alley, brick, to A. D. Bowen, Meridian St., to Amer. Constr. Co., 1201 East George St.; cement walks to H. Pothast.

★**Ind., Lafayette**—(Official)—County let contract 2.06 mi. brick road, Fairfield Twp., to W. Mahoney, 5 Sharp Bldg., $78,200; road in Wabash Twp., Slattery Constr. Co., Crawfordsville, $64,217. Noted June 2.

★**Mich., Bay City**—Bd. Pub. Wks. let contract paving portion Lincoln Ave., 11th and Water Sts., to Cleveland Trinidad Paving Co. 3407 Trumball St., Cleveland, $35,834. Noted July 5.

★**Illinois**—State Highway Comn., let contract 4800 lin.ft. in Saline Twp., to Hug Lumber & Constr. Co., $10,425.

★**Ill., Glencoe**—(Official)—City let contract paving Glencoe Rd., 4800 sq.yd. brick on 3-in. sand-cement cushion filled with cement grout, concrete curb and crushed stone and screening to level up present foundation to E. M. Laing, Highland Park. Noted June 28.

★**Ill., Joliet**—City let contract improving 3rd Ave. and Wilson St., asphalt on 5-in. concrete base, concrete curb and gutters, etc., to R. F. Conway Co., Chamber of Commerce Bldg., Chicago; $24,077.

★**Ill., Rock Island**—City let contract paving portion 6th Ave. to T. J. McCarthy, 3rd and Perry Sts., Davenport, Ia., $2.19 for paving, 49c. curbing.

★**Ill., Winnetka**—(Official) — City let contract paving Sheridan Rd., 35,500 sq.yd. 2-course rein.-con. with integral curb, 11,755 cu.yd. grading and 98 catch basins to H. E. Goelitz & Co., Oak Park, $114,000. Noted June 28.

★**Minn., Buhl**—(Official)—City let contract paving 12,000 sq.yd. streets, bitulithic, to L. McCann, Eveleth. Noted June 21.

★**Kan., Hutchinson**—City let contract paving streets to Stamey-Mackey Constr. Co., $56,000; curbing and guttering to J. H. Shear & Sons and C. E. Brown, all of Hutchinson. Noted June 7.

Mo., Kansas City—County received low bid resurfacing and macadamizing Kansas City-Independence Rd. from W. F. Dwyer, $31,684, and A. Jaicks Co., Amer. Bank Bldg., $32,040.

★**Tex., Dallas**—Co. Comrs. let contract paving Coppell Rd., trap-rock concrete, to Vibrolithic Constr. Co., Terminal Bldg., 94c. per sq.yd.

★**Tex., McLean**—City let contract of 18-mi. clay road to P. M. Skinner. About $15,000.

★**Idaho, Lewiston**—Washington State Highway Bd. let contract constructing highway from Idaho-Washington state line to Uniontown to G. L. Strickler, Pullman, Wash. About $17,276.

Utah, Salt Lake City—(Official)—City received low bids grading, guttering and paving Center and other streets bitulithic on bituminous macadam base from J. Morgan, Inc., 152 West 2nd St., $52,739; J. W. Mellen, Auditorium Bldg., $52,159. Strange-Maguire Pav. Co., Utah Savings & Trust Bldg., $56,965. Contract will not be awarded because of defeat of improvement bond issue. S. Q. Cannon, city engr. Noted June 21.

Wash., Asotin—City received low bids paving various streets, concrete from Enoch & Dole, Lewiston, Idaho, $20,955; C. M. Payne, Spokane, $21,236.

Wash., Spokane—City received low bids paving and grading portion Mallon Pl. from Warren Constr. Co., Assn. Bldg., Portland, bitulithic, $27,897, C. M. Payne, East 724 Mission Ave., bituminous, $28,918, Spokane Bitumas Paving Co., bitumas, $31,300; installing sewers from Heikkila, Miller & Paulson, $8500. P. L. Langan, $9449. Spokane Bitumas Paving Co., $8350. Noted June 21.

★**Wash., Walla Walla**—City Council let contract paving portion 4th St. to Warren Constr. Co., Journal Bldg., Portland; about $12,854.

★**Wash., Waterville**—(Official)—County let contract building highway. Local Improv. Dist. No. 3, to Bailey & O'Connor, Wenatchee, $11,610. Noted June 21.

★**Oregon**—State Highway Comn., Salem, let contract 10 mi. hard surface pavement, to Warren Constr. Co., 14 Assoc. Bldg., Portland. About $119,120.

★**Ore., Astoria**—City let contract for building 1 mi. concrete pavement to Montague O'Reilly Co., Blake McFall Bldg., Portland. About $16,236. Noted June 28.

Ore., McMinniville—City received low bids paving in Dists. Nos. 17 and 19 from Dennis Constr. Co., McMinnville, $12,528; Dists. 18, 20, 21, 22, Montague-O'Reilly Co., Blake McFall Bldg., $39,675. Noted June 14.

★**Ore., Pendleton**—County let contract paving 10-mi. highway to Warren Constr. Co., Journal Bldg., Portland. About $119,120.

★**Ore., Portland** — Council let contract paving portion Woodstock Ave. to Oregon-Hassam Paving Co., Bd. of Tr., $26,654.

Ore., Warrenton—Co. Comrs., Astoria, received low bid building ½-mi. hard-surfaced road from Arenz Contr. Co., Astoria, $17,897. Noted June 21.

★**California**—State Highway Comn., Sacramento, let contract 10.8 mi. road in Yolo Co., between Blacks and Hershey, to C. H. and A. H. Gorrill, San Francisco, $71,152; 6.4 mi. Tulare Co., Pixley to Tipton, to L. C. Garnsey, 108 West 6th St., Los Angeles, $34,980; 11 mi. Monterey Co., Camphora to Chualar, to Palmer & McBride, Hooker & Leub Bldg., San Francisco, $60,118.

★**Cal., Los Angeles**—Bd. Superv. let contract bituminous paving on Lexington-Gallatin Rd., Dist. 103, involving 6594 sq.yd. excavation, 14,242 lin.ft. shaping roadbed, 3100 sq.yd. paving, 3698 lbs. rein. steel, 11,420 lin.ft. expansion joints, 64 cu.yd. concrete in culverts, etc., to F. Hoffman, Long Beach, $16,990.

★**Cal., Manhattan Beach**—City let contract improving streets to R. H. Beaton, 623 Beacon St., San Pedro, $54,569. Noted June 14.

★**Cal., Martinez**—County let contract building Sect. 5 of county highway system to O'Brien Bros., Martinez. About $119,058.

★**Cal., Napa**—County let contract concrete highway between Greenwood Hill and county line to Worswick Constr. Co., Vallejo, $86,673. Noted June 21.

★**Cal., San Bruno**—City let contract improving several streets to Municipal Improve. Co., Richmond. About $119,000.

★**Cal., San Diego**—Bd. Supervs. let contract grading and building road from Pala to north line of county, involving excavating through rock to F. Doran, 3330 30th St., $29,779.

Cal., Ventura—Bd. Superv. received low bid grading and building 4-in. concrete paving and concrete and corrugated iron culverts on 754 mi. Div. Y, Sec. 2, La Crosse to Nordhoff Rd., from C. H. Hudson, Marsh Strong Bldg., Los Angeles, $34,422; similar work on 6.01 mi. Div. 4, Piru to county line from Brashear-Burns Co., Wilshire Blvd. and La Brea Ave., Los Angeles, $19,968. Noted June 28.

Cal., Visalia—Bd. Superv. received low bid 2,358,722 sq.ft. warrenite or topeka surfacing on southern division of county on roads connecting Porterville, Exeter, Lindsay, etc., via Terra Bella and Ducoras, follows: A. Teichert & Son, Oschner Bldg., Sacramento, warrenite, $141,523. G. H. Oswold, 405 O. T. Johnson Bldg., Los Angelee, topeka, $95,748.

★**Cal., Visalia**—Bd. Superv. let contract constructing 3,368,983 sq.ft. warrenite surfacing connecting North Dinuba, Orosi, Dinuba, Visalia, and Exeter, to Thompson Bros., Fresno, $202,139.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

New Jersey—Lehigh & New England R.R. granted permission by Bd. Public Utility Comrs. to issue $1,491,000 stock to extend and improve road. R. H. Wilbur, Phila., genl. mgr.

West Virginia—Norfolk & Western R.R. plans new line for cantonment near Petersburg, about 6 mi.; also new passenger and freight station. J. E. Crawford, Roanoke, Va., ch. engr.

Railways—Steam and Electric (Continued)

Georgia—Ocilla, Pinebloom & Valdosta R.R. plans to extend line from Milltown to Leliaton, about 7 mi. R. Henderson, Ocilla, pres.

Montana—Montana Power Co. having surveys made for laying track between Twin Bridges and Bielenberg-Hoggins and Lake Shore Mines, for electric road 14 mi. long. About $26,000. F. M. Kerr, Butte, gen. supt.

Arkansas—Iron Mountain R.R. plant to build 10-mi. track to U. S. cantonment near Little Rock, under supervision of A. Robertson, St. Louis. W. L. Cole, Keswick, Cal., genl. mgr.

Washington—City of Tacoma soon lets contract building 10,000-ft. track to Todd Shipyards; work involves ½-mi. viaduct over yards of Chicago, Milwaukee & St. Paul Ry. About $180,000. C. F. Loweth, Chicago, ch. engr.

Saskatoon—City Comrs. Regina, plan to build ½-mi. track on Pasqua St. to convert red and blue lines into belt line, about $12,000; also 2nd track on Elphinstone St. to exhibition grounds. B. Green, Regina, way engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. C., Lake Toxaway—Moltz Lumber Co. let contract 7-mi. road to H. R. Millard Co., Inc. R. S. Brown, Legal Bldg., Asheville, ch. engr.

★Kentuckey—Illinois Central R.R. let contract to L. J. Smith Contr. Co., Commerce Bldg., Kansas City, Mo., to build line from Dawson Springs to Providence, about 17½ mi. involving handling 600,000 cu.yd. material, mostly rock, to Walsh Constr. Co., 114½ West 3rd St., Davenport, Ia., to revise grades and alignment from Scottsburg to Dawson Springs, about 11½ mi. involving 700,000 cu.yd. material also bridge with 75-ft. span and trestle approach over Tradewater River.

Indiana—(Official)—Pennsylvania Lines West of Pittsburgh let contract grading and masonry for 2nd track work, grade revision and yard work for lines between Logansport and Royal Center to P. T. Clifford & Son, Valparaiso.

EXCAVATION AND DREDGING

Proposed Work

La., Plaquemine—Drainage—Lake Long D. D. voted $60,000 bonds to drain 35,000 acres between Plaquemine, town of Bayou Goula, Mississippi River and Grand River. E. Gay, J. Wilbert and J. Templet, bd. mgrs. Noted May 24.

O., Youngstown—Canal—Lake Erie & Ohio River Canal Bd., Hartje Bldg., Pittsburgh, filed final report with Governor of Pennsylvania and favors building of waterway. Cost of canal is estimated on prices prevailing in 1914 and 1915 at $65,000,000 exclusive of branches to New Castle, Pa., and Warren, O., each of which will cost $3,000,000, and is designed to furnish last deep waterway link necessary to connect iron ore field of Minnesota and Michigan with coal fields of West Pennsylvania, West Virginia and Ohio.

Ill., Havana — Drainage — Chautauqua Levee and Drainage Dist. plans to reclaim 4000 acres of land. About $236,000. Project requires 4-mi. levee and powerful pumping plant to remove water from marshlands.

Ia., Sioux City—Drainage—County plans system in Garretson D. D. About $120,000. C. Moriarty, 600 United Bank Bldg., engr.

Mo., Bloomfield—Drainage—County created new drainage district to be known as Mingo D. D., involving 30,000 acres, of which 1,300 acres will be ditches. About $450,000.

Ore., Salem—Drainage—Payette Oregon Slope Irrigation D. D. plans to issue $225,000 bonds to install drainage system.

BIDS DESIRED

Ind., Brownstown—Drainage—Until July 26, by F. B. Douglas, co. supt. building Frank M. Bush et al., drain, Jackson Twp., involving 74,730 cu.yd. excava. About $10,796.

Ind., Winamac—Ditch—Until July 30, by G. Fritz, trustee Jefferson Twp., improving Stout & Dutton ditch and 2 branches, Cline, Skinner, Koepkey, Conrad and Pingle ditches.

Ind., Winamac—Ditches—Until July 31 by G. Fritz, trustee Jefferson Twp., improving Warnock, Fred Kopka, Dan Mohler, Stine, Schleman, Meeks Branch No. 4 and Kelly ditches.

Ill., Lawrenceville—Ditch—Until July 26, by L. A. Funk, comr. Allison Ditch Dist. No. 1 for redredging ditch, 10 mi. long, 73,427 cu.yd. for dredge boat, 5500 cu.yd. for teams. Bottom width from 12- to 14-ft. wide.

Ia., Mason City—Drainage—Until July 23, by G. E. Frost, co. aud., building D.D. No. 53.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., Trenton—Dredging—Dept. Commerce and Navigation received low bids dredging section of proposed inland waterway connecting Barnegat Bay with Manasquan River from L. B. Harrison, 220 Bway., New York City, 36c. per cu.yd.; Hill Dredging Co., Atlantic and Somerset Pl., Atlantic City, 41⅜c.; Delaware Dredging Co., Phila., 44½c. About $50,000 available for work. Noted July 19.

★Ia., Cedar Falls—Drainage—County let contract D. D. No. 1 to A. D. McCall, 611 West 12th St., $30,000.

★Minn., Benson—Ditch—County let contract Judicial Ditch No. 9 to E. A. Barr, Redwood Falls, $33,442. Noted June 14.

★N. D., Milnor—Drain—County let contract Milnor Hall Drain to Great Northern Bridge Co., 635 Lumber Exchange Bldg., Minneapolis, $35,000.

Cal., Chino—Ditch—Storm Water Protection Dist. received low bids building 5 sections of ditch from Los Angeles Rock & Gravel Co., 3439 Pasadena Ave., Los Angeles, $11,830, and L. Farrell, Pomona, $26,649.

★Cal., San Diego—See "Streets and Roads."

INDUSTRIAL WORKS

Proposed Work

N. Y., Brooklyn—Lancastershire Realty Co. had plans prepared by Shampan & Shampan, archts., 772 Bway., for 2-story, 121 x 153-ft. brick service station at Bedford Pl. and Atlantic Ave. About $150,000. L. Gold, 44 Court St., pres.

N. Y., Newton Falls — See "Reinforced Concrete."

N. Y., New York—J. Nimphius, 521 Bergen Ave., having plans prepared by M. J. Garvin, 3307 3rd Ave., for 6-story, 75 x 75-ft. brick garage and storage bldg. About $60,000.

N. J., Newark — See "Reinforced Concrete."

N. J., Rahway—Merck & Co., Lincoln Ave., plans rein.-con. and brick additions to its plant. About $140,000.

N. J., Trenton—American Bridge Co., foot of Warren St., plans addition on Delaware River, South Trenton. About $1,000,000.

Pa., Phila.—See "Reinforced Concrete."

Pa., Phila.—Niagara Mfg. Co., 323 North 2nd St., soon lets contract 2-story brick factory, 54th and Lancaster St. F. E. Hahn, archt.

Pa., Pittsburgh—National Biscuit Co. has plans prepared baking plant at Penn Ave. and Lambert St. About $600,000.

Pa., Reading—Metropolitan Electric Co., controlled by W. S. Barstow & Co., 50 Pine St., New York City, plans to rebuild electric power station at Klapperthal. About $100,000.

Va., Alta Vista—Alta Vista Cotton Mills, Alta Vista, plans to enlarge its plant. About $75,000.

W. Va., Belle—C. H. Hughes, 27 William St., New York City, and associates, plans chemical factory here. About $1,000,000.

N. C., Newbern—East Carolina Packing Co. having plans prepared by C. L. Brooks Eng. Co., Moultrie, Ga., for packing plant. About $65,000.

Ala., Mobile—See "Miscellaneous."

La., De Lidder—American Creosoting Co. plans factory here. About $100,000.

La., Jeffris—Jeffris Lumber Co., Jeffris, plans veneer mill. About $300,000.

Tenn., Chattanooga—De Camp Glass Casket Co., Bank of Commerce Bldg., Memphis, plans plant near here. About $200,000.

O., Akron—Akron, Bitwell Tire & Rubber Co., had plans prepared for new factory. About $150,000. W. C. Owen & Co., archt., 1900 Euclid Ave., Cleveland, soon receives bids.

O., Cleveland—A. & B. Realty Co. plans 3-story, 60 x 200-ft. garage. About $100,000. E. N. Buel, 4400 Euclid Ave., pres., A. W. Wolf, archt., Swetland Bldg., soon receives bids.

O., Cleveland—Baltimore & Ohio R.R. plans freight terminal. About $2,500,000. H. Lane, Baltimore, ch. engr.

O., Cleveland—Detroit-Lake Ave. Co., c/o A. M. Allen, archts., 1900 Euclid Ave., will build 1- and 2-story, brick and steel market house at Detroit and Lake Aves. About $250,000.

O., Cleveland—Ohio Blower Co., 5125 Perkins Ave., has purchased site near Cedar Ave. "Y" and plans to build plant.

O., Euclid—Supreme Motor Corp. plans 1-story, 100 x 400-ft. factory, St. Clair Ave. and Bliss Rd. About $300,000. C. F. Jamison, 218 Union Bldg., pres., and A. M. Allen Co., 303-1900 Euclid Bldg., archts.; both of Cleveland.

O., Toledo—Curtiss Aeroplane Co. plans to build largest airplane factory in country on Terminal R.R. J. N. Willys, pres.

O., Youngstown—Wilcoff Co., Wilson Ave., has increased capital stock from $300,000 to $600,000 and plans new factory.

Mich., Detroit—Aluminum Castings Co. plans 1-story, 106 x 177-ft. addition. About $100,000. C. B. Bohn, 1576 Jos. Campau Ave., mgr. C. W. Brandt, archt., 502 Kresge Bldg., soon receives bids.

Mich., Detroit—Diamond Power Specialty Co. plans 2-story, 112 x 128-ft. factory on Caniff Ave. About $70,000. R. Herman, 82 1st St., pres. Esselstyn & Murphy, archts., 206 New Telegraph Bldg., soon receive bids.

Ill., Champaign—E. V. Kirby, Orpheum Bldg., had plans prepared by J. Royer, archt., Flat Iron Bldg., Urbana, for 3-story, 68x132-ft. garage. About $60,000.

Ill., Chicago—See "Reinforced Concrete."

Ill., Chicago—Gibson Motor Co., 923 East 47th St. plans garage. About $50,000. H. L. Newhouse, 4630 Prairie Ave., archt.

Ill., Chicago—W. F. Hall Printing Co., Chicago Ave., Townsend, Kingsbury and Superior Sts., plans 7-story addition. About $900,000.

Ill., Chicago—Illinois Engineering Co., 314 Federal Bldg., plan factory on Racine Ave. and 21st St. About $65,000.

Ill., Peoria—L. E. Roby, and associates, organized company to be known as Peoria Malleable Castings Co., with $175,000 capital stock and plan malleable iron plant. L. E. Roby, pres. H. Hemingway, vice-pres.

Wis., Milwaukee—W. G. Kellogg, 103-373 Bway., and C. Petit plant to build grain elevator on belt line of North-Western R.R. About $200,000.

Ia., Des Moines—Campbell Baking Co. had plans prepared for brick and terra cotta addition to bakery. About $150,000. N. T. Vorse, 911 S. & L. Bldg., archt.

Minn., Minneapolis—Minneapolis, St. Paul & Sault Ste. Marie Ry. plans addition to present elevated plant to have capacity of 1,150,000 bu. C. N. Kalk, 317 2nd Ave., ch. engr.

Ark., Springdale—Middle West & Electric Co., purchased plant of Springdale Light & Power Co., and plans electric plant and transmission lines supplying electricity in Springdale, Fayetteville and Rogers plant in Fayette. About $75,000.

Tex., Wichita Falls—Atlas Wind Mill Co. plans factory. About $150,000. J. E. Robertson, Mineral Wells, pres.

Idaho, Oneida—Amalgamated Sugar Co. plans new factory. About $1,000,000.

Nev., Fallon—Nevada-Utah Sugar Co. plans addition. About $100,000. F. S. Bramwell, mgr.

Ore., North Bend—North Bend Mill & Lumber Co., plans new sawmill, planing mill and dry kiln. About $120,000.

Ore., Portland—W. P. Fuller & Co., 12th and Davis Sts., plans 4 steel tanks and concrete factory on 17th and Holgate Sts. About $100,000.

Que., Shawinigan Falls—Canadian Aloxite Co., subsidiary Carborundum Co., Buffalo Ave. and 18th St., Niagara Falls, plans factory. About $250,000.

Ont., Chatham—International Harvester Co. plans new brick foundry. About $50,000.

Ont., Kitchener—Canadian Consolidated Rubber Co. preparing plans brick additions to machine shops. About $50,000.

Ont., Sarnia—See "Structural Steel."

Sask., Moose Jaw—See "Reinforced Concrete."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Long Island City—See "Reinforced Concrete."

★Pa., Phila.—Penn Chemical Co. let contract brick and concrete factory and 1-story power house to Nickson, Duggan & Co., Bailey Bldg., $75,000.

Industrial Work (Continued)

★Mich., Grand Rapids—Llewellyn Bean Co. let contract, 120 x 400 ft. bean elevator, to C. Hoertz & Son. About $200,000.

★Minn., Minneapolis—Yerza Andrews & Thurston Co., 622 Flour Exchange, let contract large grain elevator at 35th St. and Hiawatha Ave., to Barrett & Record Co., Flour Exchange.

★Kan., Ft. Scott—Borden's Condensed Milk Co. let contract condensing plant to A. E. Madorie, 409 Reliance Bldg., Kansas City, Mo. About $100,000.

★Neb., Omaha—Hoagland Lumber Co., Keeline Bldg., let contract to J. C. Mardis & Co., for 4-story, 132x132-ft. mill. About $200,000.

★Neb., Omaha—McCaffrey Motor Co., 10th and Howard Sts., let contract, brick and stone garage, to Olson & Johnson, 638 1st Natl. Bank Bldg. About $50,000.

★N. D., Grand Forks—Northern Packing Co. let contract to Spald Albee & Smith General Constr. Co., Minneapolis, $168,950.

★Mo., St. Joseph—Battreall Shoe Co., 4th and Jule Sts., let contract 7-story addition to P. P. Buddy Constr. Co., 501 North Main St., $125,000.

Mo., St. Joseph—Montgomery Elevator Co. let contract, 6-story, 121x125-ft., brick and stone warehouse addition, 4th and Mitchell Sts., to T. W. Hackett, 1023 Church St. About $75,000.

★Tex., Wichita Falls—Wichita Mill & Elevator Co. let contract 1000 bbl. flour mill to Burrell Eng. & Constr. Co., 323 South La Salle St., Chicago. About $300,000.

★Wash., Seattle—Earl Fruit Co. let contract 10 warehouses in eastern Washington towns to Hurley-Mason Co., Hoge Bldg. About $500,000.

★Cal., Fresno—Willys Overland Co. let contract 3-story, 100x150-ft. brick and concrete automobile service plant, Van Ness Ave., to R. F. Felchlin Co. About $60,000. Noted June 7.

★Ont., Toronto—Willard's Chocolate Co., Ltd., 260 Spadina Ave., let contract factory and warehouse, to Yolles & Rotenberg, 67 Baldwin St. About $80,000.

BUILDINGS

Proposed Work

N. H., Nashua—High School—Bd. Educ. plans, 2-story, brick. About $200,000. T. M. James, 1855 Devonshire St., Boston, archt.

Mass., Falmouth — Hotel — Siders Pond Inn Incorporation, care W. H. A. Sisson, having plans prepared by Smith & Howland, archts., 545 Pleasant St., New Bedford, 3-story, 36 x 80-ft., 2 wings 35 x 120-ft. About $125,000.

Mass., Wellesley—College—Wellesley College had plans prepared by Day & Klauder, archt., 925 Chestnut St., Phila., for 3 buildings—2- and 3-story. Crain & Furgeson, 5 Beacon St., Boston, archt.

Conn., Mansfield—State plans new buildings for Mansfield Training School and Hospital. About $250,000. L. P. Marvin, Hartford, chn. Cudworth & Thompson, 148 Main St., Norwich, archts.

Conn., Norwich—Ward—State Hospital for Insane had plans prepared, 3-story, 40 x 285-ft. About $130,000. T. F. Erdmann, supt. Cadworth & Thompson, 148 Main St., archts.

N. Y., Auburn—Hospital—Sisters of St. Francis, c/o St. Anthonys Academy, Court St., Syracuse, and Rev. W. Payne, 15 Clark St., having plans prepared, 4-story, 70 x 190 ft. brick and steel with 4-story wings and chapel, by S. S. Hillger, 9 Seward Blk., archt.

N. Y., Brooklyn—Exchange—New York Telephone Co., 15 Dey St., has plans prepared, 3-story, Liberty Ave. and Milford St. About $125,000.

N. Y., Brooklyn—Loft—H. & P. Corp. plans, 4-story, 100 x 190 ft., brick, on Atlantic Ave. About $95,000. S. Parnass, 51 East 97th St., New York City, pres. S. Millman & Son, 26 Court St., archts.

N. Y., Brooklyn—Parish House—Presbyterian Church, Lafayette Ave., plans, 4-story, 40 x 90 ft., brick and stone, at 95-7 Oxford St. About $85,000. C. Albertson, 336 Washington Ave., pastor. Clark & Arms, 21 West 45th St., archts.

N. Y., Lily Dale—Hospital—E. Newton Tuberculosis Hospital having plans prepared to be built on west shore of Cassadago Lake. About $150,000.

N. Y., New York—Hospital—Bronx Hospital Assn. plans, 2- and 4-story, 35 x 100 ft., brick and terra cotta, at Charlotte St. and Boston Rd. About $50,000. A. Goldman, 108 2nd Ave., pres. L. A. Abramson, 220 5th Ave., archt.

N. Y., New York—Store—J. C. Davies, 149th St. and 2nd Ave., plans 1-story, brick, at Burnside and Jerome Aves. (Bronx Boro.). About $50,000. Moore & Landsiedel, 149th St. and 3rd Ave., archts.

N. Y., Rochester — Club — Knights of Columbus having plans prepared by Gordon & Madden, archts., Sibley Bldg. About $150,000.

N. J., Newark—Engine House—City having plans prepared by F. Grad, Amer. Natl. Bank Bldg., Suringfield and Belmont Aves., in 13th Ward at Orange and Sandford Aves. About $50,000. T. L. Raymond, City Hall, mayor.

N. J., New Jersey—Labor Temple—Labor Organizations of Hudson Co. having plans prepared by J. T. Rowland, Jr., archt., 100 Sip Ave., 4-story, 127 x 140-ft. About $60,000.

N. J., Jersey City—School—City voted $50,000 bonds to build addition to P. S. No. 11 and $350,000 bonds for new 3rd Ward School. G. E. Keenan, pres. school bd.

N. J., Red Bank—School—Bd .Educ. voted $161,700 bonds to build 2 schools. J. Bucklin, pres.

Pa., Erie — Depot — New York Central R.R. had plans prepared. About $600,000. G. W. Kittredge, Grand Central Terminal, New York City, ch. engr.

Pa., Lititz — Bank and Store — Lititz Spring Natl. Bank, care E. H. Snyder, 40 East Main St., having plans prepared by C. E. Urban, archt., Woolworth Bldg., Lancaster, 2-story. About $90,000.

Pa., Phila.—Bank and Office—C. E. Durant, care of F. C. Durant, Land Title Bldg., having plans prepared by M. Fielding, archt., 520 Walnut St., 8-story, 25 x 80 ft. About $50,000.

Pa., Schuylkill Haven—Hospital—Comrs. Schuylkill Co., Pottsville, soon let contract 1-story, 130 x 138-ft. addition. About $50,000. F. X. Reilly, 112 South Centre St., Pottsville, archt.

Wash., D. C.—Club—Washington Athletic Club, plans, 12-story, 133x150-ft. About $650,000. J. M. Kenyon, pres. Millburn Heister & Co., Union Savings Bank Bldg., archts.

Wash., D. C.—Parochial School—Holy Trinity Congregation having plans prepared by F. G. Pierson, archt., Washington Loan and Trust Bldg., 2-story. About $150,000.

Va., Richmond—High School—Bd. Educ. plans. About $50,000. C. M. Robinson, Times-Dispatch Bldg., archt.

W. Va., Petersburg—Station—See "Railways."

S. C. Saluda—Court House—County having plans prepared by A. Sayre, archt., Beckley Bldg., Anderson, brick and stone. About $50,000.

Ala., Bessemer—Court House—Co. Comrs. plan. About $150,000.

Tenn., Memphis—Hospital—Baptist Memorial Hospital having plans prepared by C. O. Pheil, archt., Tennessee Trust Bank Bldg., 8-story, brick, terra cotta and rein.-con. addition. About $175,000.

O., Akron—Hotel and Business—J. Sop, 419 2nd Natl. Bank Bldg., having plans prepared by Practical Eng. Co., Akron Savings and Loan Bldg., 3-story, 60 x 115-ft.

O., Akron—School—Bd. Educ. plans 2- or 3-story. About $500,000. F. L. Packard, 1212 Hayden Bldg., Columbus, archt.

O., Cleveland Heights—(Warrensville P. O.)—School—Bd. Educ. soon lets contract, 2-story, brick and stone. About $180,000. E. Bryan, clk. F. C. Warner, 767 Hippodrome Bldg., archt.

O., Columbus—Hospital—McKinley Hospital having plans prepared by Stribing & Lum, archts. 85 North High St., for large addition.

O., Cleveland—Home—St Stanilas' Parish having plans prepared by J. F. Jaisinski, archt., 604 Rose Bldg., 42 x 96-ft., on Forman Ave., S. E., near East 85th St. About $60,000.

O., Cleveland—School—Bd. Educ. having plans prepared by W. R. McCormack, archt., East 6th St. and Rockwell Ave., 2-story addition. About $110,000.

O., Elyria—Club House—Lake Shore Electric Co. having plans prepared by R. H. Hinsdale, archt., 527 Erie Bldg. About $75,000. W. D. Marrow, Garfield Bldg., engr.

O., Lakewood—High School—Bd. Educ. having plans prepared by C. W. Hopkinson, Archt., 900 Rose Bldg., Cleveland, 3-story addition. About $250,000.

O., Lakewood—School—P. T. Harrold, clk. bd. educ., soon receives bids, 2-story. About $100,000. W. Hopkinson, 900 Rose Bldg., Cleveland, archt.

O., Latty—School—Bd. Educ. plans, 2-story. About $60,000. F. L. Packard, 16 Broad St., Columbus, arch.

O., Mt. Vernon—Hospital—State Bd. of Administration, c/o T. E. Davy, Oak and 9th Sts., Columbus, plans 2-story, 95 x 125-ft., here. About $50,000.

O., Toledo—Hotel—Bond Hotel Co. having plans prepared by Mills, Rhines, Bellman & Nordhoff, Archts., Ohio Bldg., 12-story. About $2,250,000.

O., Warrensville — Cottages — City of Cleveland plans to build 8 Cottages at tuberculosis sanitarium here, 3-story, 60 x 115 ft. About $100,000. L. T. Beman, 327 City Hall, dir. pub. welfare. F. H. Betz, 604 City Hall, archt., both of Cleveland.

O., Youngstown—Office—Union Land & Bldg. Co. plans, 16-stories, brick, concrete and stone. About $750,000. H. H. Stambaugh, pres., Knox & Elliott, archts., 1248 Rockefeller Bldg., Cleveland, soon receives bids.

O., Zanesville—Y. M. C. A. having plans prepared for new building. About $200,000. H. Smith, 737 Eppley Ave., chn.

Ind., Lafayette — Office — Lafayette Life Insurance Co. plans 10-story 51 x 121 ft., 3rd and Main Sts. About $250,000. W. Lane, Lansing Bldg., secy. J. F. Alexander and Son, archts., Ball Blk., soon receives bids.

Ind., New Palestine—School—Bd. Educ. having plans prepared by C. Boone, archt., Greenfield. About $50,000.

Mich., Ionia—High School—Bd. Educ. election soon to vote on $150,000 bonds to build high school.

Mich., Ishpeming — Hospital — Cleveland Cliffs Iron Co. having plans prepared, 3-story, 50 x 150, brick and rein.-con. About $80,000. M. J. Sturmarcht, 116 South Michigan Ave., Chicago, archts.

Mich., Rochester—Club—Brookland Golf and Country Club having plans prepared, 2-story, 119 x 219-ft. J. W. Case, 1448 David Whitney Bldg., archt.

Mich., Vassar—School—Bd. Educ. plans, 2-story, 80 x 148 ft. About $60,000. J. C. Peterson, State Bank Bldg., Traverse City, archt.

Ill., Chicago — Church — Sheridan Road Methodist Episcopal Congregation plans, on Sunnyside Ave. About $70,000.

Ill., Chicago — Hotel — See "Reinforced Concrete."

Ill., Rock Island—Hospital—St. Anthony's Hospital having plans prepared by H. B. Fox, archt., 301 Apollo Theater Bldg., Peoria. About $200,000.

Wis., Racine—Terminal—Chicago, Racine & Milwaukee Transportation Co., foot South Main St., soon lets contract, 6-story, brick and concrete.

Wis., Wauwatosa—Temple—Wauwatosa Lodge No. 267 plans to build. F. A. Stevens, chn. bldg. com. Leenhouts & Guthrie, 301-404 Jefferson St., Milwaukee, archts.

Ia., LeMars—Western Union College having plans prepared for following: Dormitory, $40,000; administration building, $75,000; science hall, $75,000; chapel and auditorium, $85,000; music conservatory, $35,000; library, $35,000 gymnasium, $50,000. W. G. Burkhead, Commercial Bldg., Sioux City archt.

Minn., Faribault—Cottage—State having plans prepared for girls custodial cottage at school for feeble-minded; cost $60,000. C. H. Johnston, archt., 715 Capital Natl. Bank Bldg., St. Paul, receives bids about Aug. 10.

Kan., Augusta—School—Bd. Educ. having plans prepared by G. P. Washburn & Son, archts., 222 South Main St., Ottawa. G. Watson, clk.

Kan., Garden City—School—Bd. Educ. soon lets contract, 3-story, 58 x 110 ft., brick school and 2 ward buildings, about $50,000. E. J. Drummond, clk. W. E. Hulse & Co., 207 1st Natl. Bank Bldg., Hutchinson, archts.

Kan., Wichita—City plans election to vote on bond issue to build school. About $50,000 or $60,000. H. D. Lester, city clk.

Neb., Omaha—Theater, Store and Office—A. H. Banks, Des Moines, having plans prepared by J. Latenser, archt., 626 Bee Bldg., 8-story, 132 x 132-ft. About $250,000.

Buildings (Continued)

Wyo., Riverton—Temple—Masonic Fraternity having plans prepared by Realty Inv. Co., Bee Bldg., Omaha, 3-story, 50 x 140 ft. About $60,000.

Mont., Billings — Hospital — Sisters of Mercy plan. About $250,000.

Mo., St. Louis—School—City soon lets contract 7th building to be constructed under $3,000,000 bond issue. H. W. Kiel, mayor. Noted June 28.

Mo., St. Louis—Convention Hall—City having plans prepared by W. H. Gruen, archt., Chemical Bldg. About $2,000,000. I. A. Hedges, chn. com.

Tex., Abilene—College—State plans West Texas Agricultural and Mechanical College here. About $500.000

Tex., Brownwood — College — D. Baker College having plans prepared by C. D. Hill & Co., archts., Sumpter Bldg., Dallas. About $250,000.

Tex., Carlsbad—Sanitarium—State having plans prepared by Sanguinet & Staats, archts., American Natl., Bank Bldg., Waco, 6 buildings, at tuberculosis sanitarium. About $105,000.

Tex., College Station—Dormitory—A. and M. College soon lets contract. About $90,000.

Okla., Bartlesville — Temple — Masonic Bldg. Assn. had plans prepared by J. H. Felt & Co., archts., 800 Grand Ave. Temple, Kansas City, Mo. About $275,000. McGregor & Everman, supts.

Okla., Tulsa—Store—Commerce Bldg. Co., 4th and Main St., having plans prepared, 4-story, 43 x 140-ft. brick, steel and rein-con. About $75,000. Rush, Endicott & Rush, 226 Unity Bldg., archts.

Ariz., Tucson—High School—City election soon to vote on $200,000 bonds to build high school. Address H. A. Drachman, Title Insurance Bldg.

Wash., Spokane—Administration—Whitworth College plans. About $110,000.

Cal., Las Banos—School—Bd. Educ. soon lets contract, brick and concrete; about $65,000. E. J. Kump, Rowell Bldg., Fresno, archt.

Cal., Ojai—Hotel—Ojai Improv. Co. having plans prepared by Mead & Requa, archts., 533 F St., San Diego, rebuilding Foothills Hotel, recently destroyed by fire. About $75,000.

Sal., Santa Barbara—Hospital—County had plans prepared by R. F. Sauter, archt., 1206 State St. About $50,000.

N. B., Moncton — Hotel — Brunswick Hotel, Ltd., having plans prepared, stone and brick, About $125,000. R. Carter, mgr.

Que., Montreal—School—City plans to build 2 schools. About $190,000. J. E. A. Benoit, 1200 Wellington St., archt.

Ont., London—Theater—P. Smirlies, 197 Dundas St., plans. About $100,000.

B. C., Burnaby—Studio—Dominion Film Co., Orpheum Bldg., plans new building. About $50,000. J. A. Nelson, managing dir.

BIDS DESIRED

N. Y., Central Islip—(Official)—Acute Patients' Building—Until July 31 by State Hospital Comn., Albany, addition to Central Islip State Hospital. E. S. Ellwood, secy; advertised in this issue. Noted July 12.

N. Y., White Plains—High School—Until July 23, by L. C. Shaw, secy. Bd. Educ.

O., Akron—Hotel—Until Aug. 1, by Mills & Millspaugh, archts., 49 North High St., Columbus, for 10-story hotel to be constructed for Park Hotel Co. About $350,000.

O., Cadiz—Home—Until July 21, by E. P. Hines, co. aud., for addition to Harrison Co. Children's Home.

O., Lebanon—High School—Until Aug. 3, by W. C. Maple, clk. bd. educ. Bausmith & Drainie, 901 Gerke Bldg., Cincinnati, archts.

Wis., Barksdale—School—Until July 25, by H. Wildhagen, archt., 842 College Ave., Ashland.

Minn., Warroad — High School — Until Aug. 1, by Bd. Educ. About $70,000. E. F. Broomhall, 710 Alworth Bldg., Duluth, archt.

Kan., Great Bend—Court House—Until Aug. 8, by W. E. Beardsley, co. clk., 4-story, 102 x 124-ft. About $190,000. W. E. Hulse & Co., First Natl. Bank Bldg., Hutchinson, archts. Noted July 5.

Kan., Hutchinson—High School—Until July 24, by Bd. Educ., brick. E. Hulse & Co., 207 1st Natl. Bank Bldg., archts.

Kans., McPherson — School — Until July 25, by F. H. Hawley, chn. bd. educ. Markgraf & Mampe, 413 Ridge Bldg., Kansas City, archts.

S. D., Wessington Springs—High School—See "Reinforced Concrete."

Wyo., Cheyenne—Until Aug. 6, by City, for city and county buildings. About $170,000. J. A. Martin, comr finance. W. Dubois, 1st Natl. Bank Bldg. archt.

Okla., Cushing—Bath House—Until Aug. 1, by City Clk., to be built in Randlett Pk. About $100,000.

Okla., Cushing—Court House—Until Aug. 1, by county, for new building. About $100,000.

Cal., Santa Barbara — Hospital — Until Aug. 6, by Co. Supervs., 1-story, 51 x 235-ft., brick and rein.-con. About $60,000. C. A. Hunt, co. clk. R. F. Sauter, San Marcos Bldg., archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Brooklyn**—Hospital—Bay Ridge Hospital, 60th St. and 2nd Ave., let contract 4-story, to E. E. Paul, Co., 101 Park Ave., New York City, $150,000.

★**N. Y., Mt. Vernon**—School—Bd. Educ. let contract addition to School 9, East 5th St. and Bedford Ave., to O. J. Tegan, 452 Union Ave. About $50,000.

★**N. Y., Niagara Falls**—Y. W. C. A. let contract brick, concrete and stone building to Brass Bros., 110 Whitney Ave. About $66,000.

N. Y., Syracuse—School—Bd. Educ. received low bid from Central City Constr. Co., 104 Union Blk., $97,450.

★**N. J., Newark**—Theater—A. W. Moore, 22 Green St., let contract, 1- and 2-story, 125 x 150 ft., Prospect Ave. and Heller Pkway., to I. Feinsod, 402 Hunterdon St. About $70,000.

★**Pa., Phila.**—Office—Lit Bros. let contract, 7th and Filbert Sts., to Keostone State Constr. Co., Pennsylvania Bldg. About $605,000.

Pa., Phila.—Stations—City received low bid 3-story, brick, concrete and terra cotta stations, from Standard Constr. Co., Drexel Bldg. About $510,000. Noted June 21.

★**Pa., Scranton**—Bank—Third Natl. Bank, 118 Wyoming Ave., let contract addition and alterations to E. S. Williams, Coal Ex. Bldg., $80,000.

★**Wash., D. C.**—Convent—Asso. of Professors of St. Mary's Seminary let contract, 2-story, to C. L. Cassidy Co., Southern Bldg. About $50,000.

Fla., St. Augustine—Hospital—Trustees Flagler Hospital rejected bids, 3-story, brick and rein.-con. About $100,000. New bids soon. F. A. Hendrick, 26 Cathedral St., archt. Noted June 14.

★**O., Cleveland**—Church—St. John's Nepomucene Congregation c/o Rev. J. Hroch, 4914 Fleet St., let contract, 1-story, 78 x 138-ft., to C. A. Garson Co., 6408 Euclid Ave., $75,000.

★**Ill., East Moline**—Y. M. C. A. let contract 4-story, 82 x 101-ft. building to C. E. Heaps, 310-12 Peoples Bank Bldg., Moline. About $50,000. Noted July 5.

★**Illl., Urbana**—Educational—University let contract to English Bros., 55 North Walnut St., Champaign. About $151,000.

★**Ia., Nevada** — Infirmary — County let contract to W. F. Kuchero, 622 Hubbell Bldg., Des Moines. About $56,000.

★**Ia., Traer**—High and Grade School—Bd. Educ. let contract to McNanus & Tamoske, Endicott Bldg., St. Paul, $71,552.

★**Minn., St. Paul**—Depot—St. Paul Union Depot Co. let contract depot and accompanying terminal yards, and improvement necessitating an estimated expenditure of $11,000,000 to Morris, Shepard & Dougherty, 814 Globe Bldg., and G. J. Grant Constr. Co., 902 Exchange Bank Bldg. Practically all railroads entering St. Paul will terminate here. M. V. Seymour, atty. for company.

Minn., St. Paul—Exchange—Northwestern Telephone Co. let contract to F. C. Norlander, 408 Amer. Natl. Bank Bldg. About $125,000.

★**Kan., Larned**—Court House—County let contract, 3-story, brick, stone, concrete and steel, to W. Foley, Larned. About $117,500. Noted June 14.

★**Neb., Lincoln**—University—Bd. Regents State University let contract, 3-story, 62 x 156-ft., brick, stone, terra cotta and concrete, to B. J. Gobst, Lincoln, $125,000. Noted June 21.

★**Neb., York**—Hotel—York Hotel Co. let contract 6-story, 90 x 118-ft., brick, terra cotta and rein.-con. to P. Kiewitts, 154 Omaha Natl. Bank Bldg., $130,000.

★**Ark., Little Rock**—Hotel—Bd. Dir. Marin Hotel let contract, 9-story fireproof annex to W. F. Ault, 481 Main St. About $100,000.

★**Tex., Waco**—Coliseum—City let contract new Cotton Palace Coliseum to H. J. Ainsworth, 414 Amicable Bldg. About $50,000.

★**Okla., Miami**—Hotel—Miami Hotel Co. let contract 7-story, brick, stone and concrete to F. H. Crites, 2136 Belleview St., Kansas City, Mo., about $20,000. Noted May 31.

★**Okla., Norman**—Auditorium—State Bd. Pub. Affairs let contract, at Oklahoma University, to Holmboe Constr. Co., 311-15 Majestic Bldg., About $140,000.

★**Colo., Longmont**—Bank—Farmers' Natl. Bank, 4th and Main Sts., let contract to Hoggson Bros., 1735 Mapleton Ave. About $50,000.

★**Ariz., Tucson**—School—Bd. Educ. let contract 2-story, brick, to W. H. Young, $102,910. Noted July 12.

★**Wash., Seattle**—Naval Training Station, University of Washington, let contract to be built on campus to Puget Sound Bridge & Dredging Co., Central Bldg. About $65,000.

★**Ont., Toronto** — Mausoleum — Trustees Toronto Burying Grounds let contract, to Witchall & Son, Jr., 156 St. Helens Ave. About $250,000.

FEDERAL GOVERNMENT WORK

Proposed Work

S. C., Charleston — Buildings — Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., soon receives bids for 1 shell house, 1 magazine building and 1 torpedo house. About $110,000. Noted Apr. 26.

Cal., San Francisco—Pipe Line—Bureau of Docks (F. R. Harris, ch.), Navy Dept., Wash., rejected bids opened June 25. Noted July 5.

T. H., Kuahua—Building—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., soon receives bids for mine storage building. About $62,400.

BIDS DESIRED

Pa., Phila.—Crematory—Until July 30, Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., building crematory, brick walls, rein.-con. floors, roof slabs, steel beams, pitch, felt and gravel roof covering.

Wash., D. C.—Coal Handling Plants—Until July 23, by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., at Navy Yards, Norfolk, Va., and Phila., Pa.

Fla., Key West—Towers—Until July 31, by Light House Inspector, furnishing and delivering f.o.b. Key West, metal work and glass complete for 2 light towers, at Molasses and Pacific Reef, Fla.

Miss., Vicksburg—Stone—Until July 25, by 3rd Mississippi River Comn.; P. O. Box 404, furnishing 20,000 short tons stone.

Ky., Lancaster—Post Office—Until Aug. 17 by J. A. Wetmore, superv. archt., treas. dept., Wash.

Ky., Louisville—(Official)—Until Aug. 9, at U. S. Engr. Office, furnishing and delivering horses, props, etc., for Bebout weir, Dam 48, Ohio River; advertised in this issue.

Ia., Cherokee—Post Office—Until Aug. 22, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Kan., Eldorado—Post Office—Until Aug. 21, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Mo., St. Louis—Levee Work—Until July 30, by Mississippi River Comn., 1311 International Life Bldg., 80,000 cu.yd. earthwork. Druary D. D., Ill.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Broklyn—Cranes—Bureau Yards and Docks, Navy Dept., Wash., received low bids furnishing electric traveling cranes at Navy Yard (a) 2 15-ton bridge cranes, complete; (b) add for each additional bridge crane up to 4, from Niles-Bement-Pond Co., 111 Bway., New York City, (a) $40,750, 365 days (b) $20,375 each, 400 days; Pawling & Harnischfeger, 38th and National Sts., Milwaukee, (a) $44,599, 300 days, (b) $22,250, 30 days; Penn Bridge Co., Bond Bldg., Wash., D. C., (a) $49,887, 250 days, (b) $24,375, 14 days for each additional crane.

Federal Government Work (Continued)

Md., **Annapolis**—Building—Bureau Yards and Docks, Navy Dept., Wash., received low bids addition to Isherwood Hall (work complete), from W. P. Lipscomb & Co., 1405 F. St., Wash., D. C., $211,000, time 400 days; H. D. Watts Co., South and Water St., Baltimore, $220,000, time 350 days; N. Ker Co., 1123 Bway., New York City, $223,470, time 415 days.

Md., **Annapolis**—Buildings—Bureau Yards and Docks, Navy Dept., Wash., received low bids, July 9, for addition to Bancroft Hall, U. S. Naval Academy, as follows: (a) Net price and time for work complete in accordance with drawings and specification. (b) Amount and time to be deducted from net price under (a) if cement required for the work, not in excess of amount estimated by successful bidder, is furnished by Government, f.o.b. cars, Naval Academy, Annapolis, Md. Under this item bidders muse state number of barrels of cement which they estimate is required for work. If cement is furnished by Government, contractor will be required to provide ample and satisfactory storage to insure an adequate supply being maintained, and he shall be responsible for all cement delivered to him. Any cement damaged after delivery to the contractor shall be made good by him. (c) Amount and time to be deducted from net price under (a) if Government defrays transportation charges on granite. Contractor shall arrange for such transportation and shall replace any defective stone without expense to Government. (d) Amount and time to be added to or deducted from net price under (a) if concrete piles are substituted for wood piles as specified under alternative No. 1, paragraphs 382 to 387 of the specifications. (e) Amount and time to be added to or deducted from net price under (a) if brick masonry is substiuted for hollow terracotta backing of granite work above terrace-floor level, as specified under alternative No. 2, paragraphs 388 to 389 of the specifications. (f) Amount and time to be deducted from net price under item (a) if artificial cast stone is substituted for carved granite as specified under alternative No. 3, paragraphs 390 to 332 of specifications. (g) Amount and time to be deducted from net price under (a) if wood sheathing is substituted for gypsum roof construction, as specified under alternative No. 4, paragraphs 393 to 396 of specifications. (h) Amount and time to be deducted from net price under (a) if composition roofing is substituted for sheet copper as specified under alternative No. 5, paragraphs 397 to 407 of specifications. (i) Amount and time to be added to net price under (a) if entire roof construction of the present mess hall is rebuilt as specified under alternative No. 6, paragraph 408 of specifications. (j) Amount and time to be added to net price (a) if existing wood floor finish of the present mess hall is replaced with tile and cement mortar as specified under alternative No. 7, paragraph 409 of specifications. J. Henry Miller, Miller Bldg., Baltimore. (a) $2,597,000, time, 365 days, (b) $58,800, (c) $59,000, (d) $5000, (e) $3800, (f) $21,000, (g) $9400, (h) $17,000, alternate $9600, (i) $42,700, alternate $19,700, (j) $6500. P. J. Carlin Constr. Co., 1123 Bway., New York City, (a) $2,788,000, 760 days, (b) $95,000. (c) $45,000, (d) no change, (e) $10,000, (f) $10,000, (g) $5000, (h) $14,000, alternate $5000, (i) $40,000, alternate $12,000, (j) $10,000. George A. Fuller Co., Munsey Bldg., Wash., D. C., (a) $2,945,000, 415 days, (b) $100,000, (c) $96,000, (d) $10,000, (e) $9500, (f) $63,000, (g) $10,000, (h) $18,000, alternate. no change, (i) $70,000, alternate $10,000, (j) $9000. Noted June 28.

★**Wash., D. C.**—Bridges—Comr. of Indian Affairs, Wash., let contract steel highway bridges on Umatilla Indian Reservation to Monarch Eng. Co., 312 17th St., Denver, $26,000. Noted June 28.

Wash., D. C. — Cement — U. S. Engr. Office, Room 305 Southern Bldg., received low bids furnishing and delivering, at foot 35th St., here 15,000 bbl. of portland cement, from Security Cement and Lime Co., 107 Equitable Bldg., Baltimore, $1.81 per bbl.; Edison Portland Cement Co., 8 West 40th St., New York City, $1.84; National Mortar Co., 1st and M Sts., $1.94. Noted June 28.

★**Va., Hampton** — Buildings — Bureau Yards and Docks, Navy Dept., Wash., let contract temporary buildings, emergency camp, to Carolina Wood Product Co., Asheville, N. C., and Wise Granite Constr. Co., American Natl. Bank Bldg., Richmond, cost plus percentage.

Ia., Glenwood—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, from C. Weitz & Sons, 713 Mulberry St., Des Moines, $38,820; C. E. Goodhand, Wahoo, Neb., $39,500; J. H. Wiese, 1301 Citizens Natl. Bank Bldg., Omaha, $42,910. Noted June 28.

★**Wyo., Ft. Laramie**—Canal—U. S. Rec. Ser. let contract excavating main canal on Ft. Laramie Project to J. E. Hilton, Lingle, $53,410. Noted June 28.

★**Cal., Vallejo** — Storehouse—Commandant, Navy Yard, Vallejo, let contract to Clinton Constr. Co., 140 Townsend St., San Francisco, $198,200. Noted June 14.

MISCELLANEOUS

Proposed Work

Terminal—Mobile, Ala.—Gulf Mobile & Northern R.R. plans to spend $500,000 to build first unit terminal improvement to consist of slip to accommodate several ships, pier above high water, rein.-con. stormproof wharf, series of warehouses, 5 and 6 stories high. Work will involve 4000 lin.ft. piers for accommodation of vessels, 2000 lin.ft. warehouses requiring 200,000 sq.ft. floor space. Lumber docks with frontage of 2000 ft. on Mobile Bay also contemplated. B. V. Wright, Laurel, Miss., ch. engr

Garbage Disposal Plant—Newport, Ky.—City plans About $40,000.

Garbage Disposal Plant—Chicago, Ill.—E. R. Pike, city comptroller, purchased site, Goose Island, for garbage disposal plant About $158,000.

Transmission Line—Springfield, Ill.—Pub. Utilities Comn. granted permission to Consolidated Ry. to extend transmission line over tracks of Chicago, Peoria & St. Louis R.R., Sangamon Ave. to 11th St. A. D. Mackie, genl. mgr.

Park Improvements—Salina, Kan.—City council purchased Kenwood Park and plans to improve same.

Sea Wall—Bay St. Louis, Mo.—See "Reinforced Concrete."

Transmission Line—Ark., Springdale—See "Industrial Works."

Tank—Seattle, Wash.—See "Reinforced Concrete."

Flood Protection—Santa Barbara, Cal.—City having plans prepared for controlling flood waters on lower east side. Present ditch will be dredged, banks raised and automatic drainage gates installed at every block. A. B. Cook, city engr.

Transmission Line — Sherbrooke, Que. — City voted $150,000 bonds to build transmission line from Sherbrooke to power plant at Two-Mile Falls.

BIDS DESIRED

Retaining Walls—Tehamah, Neb.—See "Reinforced Concrete."

Tunnels—San Francisco, Cal.—(Official) —Until Aug. 22, by Bd. Pub. Wks. building 18-mi. tunnel aqueduct, Hetchy Hetchy Water Supply Project. M. M. O'Shaughnessy, city engr.; advertised in this issue. Noted July 12.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Elevated Railway—Brooklyn, N. Y.—Pub. Ser. Comn., 120 Bway., New York City, received low bid building Route 49, Sect. 3, Culver Rapid Transit R.R. from point near Ave. X to Sheepshead Bay, from O. Daniels & Co., Woolworth Bldg., New York, $84,600. Noted June 28.

★**Docks — Buffalo, N. Y.** — (Official) — Comr. Pub. Wks. let contract improving, along Bird Island Pier, to Great Lakes Dredge & Dock Co., D. S. Morgan Bldg., about $189,000. Noted June 21.

Incinerator—Long Island City, N. Y.—M. E. Connolly, boro. pres., received low bids for building and runway, furnaces, appurtenances and chimneys of Ravenswood Destructor, 1st Ward, from Kelly & Kelley, 12th St., $173,800; R. B. Martin, $195,300.

★**Tanks—St. Joseph, Mo.**—See "Reinforced Concrete."

★**Harbor — Redondo Beach, Cal.** — City Trustees voted to enter into preliminary contract with Jessamere Constr. & Contr. Co., 42 Bway., New York City, to build harbor to cost about $4,000,000. City has voted $300,000 toward work, Hermosa Beach will raise similar amount and Atchison, Topeka & Santa Fe R.R. and other interests will raise $600,000 cash. Noted May 31.

Barney-Hocke-Ahlers Constr. Corp., New York, N. Y., has been incorporated to engage in construction, dredging and engineering. J. G. Hocke, J. G. Ahlers and W. J. Barney, 1187 Lexington Ave., incorporators.

Hayden-Corbett Chain Co., Columbus, O., plans to open a branch at Huntington, W. Va.

Lakewood Engineering Co., of Cleveland, announces that Carleton R. Dodge, recently of C. R. Dodge & Co., New York City, has been appointed assistant sales manager in charge of the Philadelphia territory, with offices in the Widener Building, and that George H. Edbrooke, until recently with C. R. Dodge & Co., New York City, has been made sales engineer of contractors' plant and equipment.

The Laurence Contracting Co., formerly located at 2409 Walton Ave., Bronx, New York, has moved to 90 Broadway, New York City.

New Jersey Shipbuilding and Dredging Co., Jersey City, N. J., has been incorporated with $500,000 capital stock to operate a general shipbuilding and dredging business. John F. Clarke Bayonne, Albert P. Margolies, Jersey City, and E. C. Moore, New York. incorporators

William M. Hind has resigned as general manager of the Buffalo Contractors' Plant Corp. of Buffalo. N Y.

George R. Prout has been elected president of James Leffel & Co., Springfield. O., manufacturer of water turbines.

George Schautz Engr. Co., Inc., Buffalo, N. Y., has been incorporated to engage in a general contracting and engineering business. F. J Leuthner, G. and J. A. Schautz, incorporators.

The Vulcan Steel Products Co., 120 Bway., New York, N. Y. has secured the services of E. J. Parker, New York manager of the Morgan Eng. Co., as sales manager of their machinery and tool department. They plan, at the present time, to open a chain of offices throughout Europe. Japan and China, etc., and Mr. Parker expects to leave New York very shortly and personally conduct this work abroad.

State Highway Comn., Commercial Natl. Bank Bldg., Raleigh, would like to receive catalogs and prices on the following machinery, etc.: Road signs, motor trucks, steam tractors, appliances for rural telephone systems, rural lighting systems, road oilers. power on the farm, asphalt equipment, dump wagons, wagon loading machinery and pamphlets on asphalts, tar and road oils. W. S. Fallis, engr.

TRADE CATALOGS

"Stanley" Cotton Belting. Stanley Belting Corp., 32-40 S. Clinton St., Chicago, Ill. Booklet. Pp. 8; 3½ x 6 in.; illustrated.

Filtros—The New Porous Mineral Medium. General Filtration Co., Inc., Cutler Building, Rochester, N. Y. Pamphlet. Pp. 32; 6 x 9 in.; illustrated. This contains detailed information regarding the manufacture, composition, shapes, grades, uses and applications of this material.

Electric Hoists. Sprague Electric Works, 527-531 W. 34th St., New York. Bulletin No. 48,923. Pp. 8 x 10½ in.; illustrated.

Electric Hoists. Lidgerwood Mfg. Co., 96 Liberty St., New York. Bulletin No. 20; Pp. 32; 9 x 12 in.; illustrated.

Erie Revolving Shovels. Ball Engine Co., Erie, Penn. Bulletin S-16. Pp. 16; 8½ x 11 in.; illustrated.

The Chesapeake Iron Works, Baltimore, Md., announce that they are confining their manufacturing entirely to overhead electric traveling cranes of 3-motor direct-current type of from 5 to 30 tons capacity, and that they are in a position to offer very satisfactory deliveries.

Wire Rope. Macomber & Whyte Rope Co., Kenosha, Wis. Catalog M. Pp. 128; 6½ x 10 in.: illustrated.

Olsen Double Drum Batch Mixer. Olsen Concrete Mixer Co., Elkhorn, Wis. Catalog. Pp. 30; 4½ x 7½ in.; illustrated.

Mechanical Stoker, Type "E." Combustion Engineering Co., 11 Broadway, New York. Bulletin B-2, Second Edition. Pp. 24; 6 x 9 in.; illustrated.

"The Story of the Chimney." The M. W. Kellogg Co., 90 West St., New York. Pamphlet. Pp. 14; 7 x 11 in. Illustrated. This is an interesting story of the origin and development of the chimney.

"The Building of a Modern Chimney." The M. W. Kellogg Co., 90 West St., New York. Pamphlet. Pp. 15; 7 x 11 in.; illustrated.

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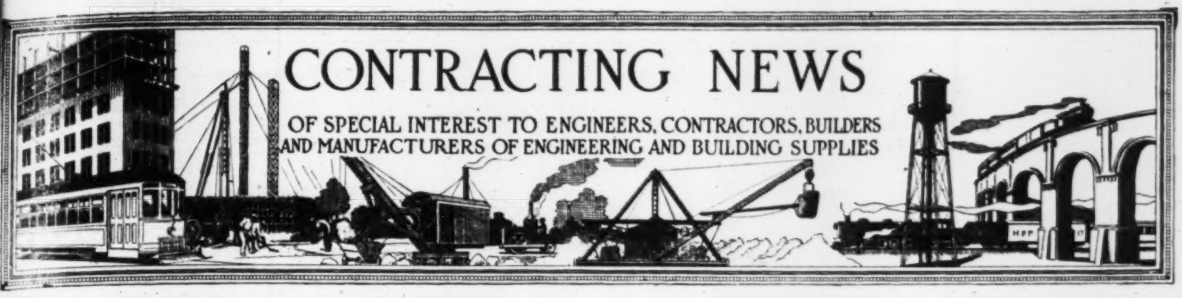
Tenth Avenue at 36th Street, New York



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 50 to 57 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
July 30.	Hamilton, Ont.	July 26
Aug. 16.	Waterloo, Ia.	July 26
Aug. 2.	Akron, O.	June 26
Aug. 7.	New York, N. Y.	July 26
	Adv. July 26.	
Sept. 11.	**New York, N. Y.**	**July 12**

SEWERS

July 30.	Mukwonago, Wis.	July 19
July 30.	Huntington, W. Va.	July 26
July 30.	West Park, O.	July 6
July 30.	Commerce, Okla.	July 26
July 31.	Salt Lake City, Utah	July 26
July 31.	Linndale, O.	July 5
July 31.	Glenwood, Minn.	July 12
Aug. 1.	Atwater, Minn.	July 12
Aug. 1.	Hazeltown, Md.	July 12
Aug. 1.	Chicago, Ill.	July 19
Aug. 1.	White Plains, N. Y.	July 26
	Adv. July 26.	
Aug. 2.	Buffalo, N. Y.	July 26
Aug. 6.	Cleveland Heights, O.	July 19
Aug. 7.	Caledonia, Minn.	July 26
Aug. 8.	Dardanelle, Ark.	July 26
Aug. 14.	Lebanon, O.	July 26

STRUCTURAL STEEL WORK

July 30.	New York, N. Y.	July 12
July 31.	Norwalk, O.	July 19
July 31.	Seattle, Wash.	July 19
Aug. 1.	Monument, Ore.	July 26
Aug. 2.	Elgin, Ill.	July 26
Aug. 2.	Miami, Fla.	June 28
	Adv. June 28 and July 5.	
Aug. 2.	Little Falls, Minn.	July 19
Aug. 3.	Albany, N. Y.	July 19
	Adv. July 19.	
Aug. 6.	Camden, N. J.	July 26
	Adv. July 26.	
Aug. 6.	Spencer, Ind.	July 19
Aug. 6.	Rio Vista, Cal.	July 26
Aug. 9.	Vancouver, Wash.	July 26
Aug. 9.	Portland, Ore.	July 26
Aug. 14.	Brazil, Ind.	July 12
Aug. 14.	Fairmont, W. Va.	July 26
Aug. 16.	Hamlin, W. Va.	July 12
Aug. 21.	Albany, N. Y.	July 26
	Adv. July 26.	

REINFORCED CONCRETE

July 30.	Watsontown, Pa.	July 5
July 31.	Dayton, O.	July 26
	Adv. July 26.	
Aug. 2.	Maquoketa, Ia.	July 26
Aug. 3.	Athens, Tenn.	July 19
Aug. 6.	Greenville, Miss.	July 12
Aug. 6.	Columbus, O.	July 19
Aug. 6.	Santa Barbara, Cal.	July 26
Aug. 6.	Camden, N. J.	July 26
Aug. 7.	Columbus, Mo.	July 26
Aug. 9.	South Bend, Wash.	July 26
Aug. 13.	Spencer, W. Va.	July 19
Aug. 22.	Beatrice, Neb.	July 19

STREETS AND ROADS

Bids Close		See Eng. News-Record
July 28.	Somerset, Pa.	July 19
July 30.	Albany, N. Y.	July 19
	Adv. July 19.	
July 30.	Jefferson, O.	July 19
July 30.	Seattle, Wash.	July 19
July 30.	South River, N. J.	July 26
July 30.	Barre, Vt.	July 26
	Adv. July 26.	
July 30.	Kenilworth, N. J.	July 26
July 21.	Toledo, O.	July 26
July 31.	Richmond, Mo.	July 26
July 31.	Indiana	July 26
Aug. 1.	New York, N. Y.	July 26
	Adv. July 26.	
Aug. 2.	Buffalo, N. Y.	July 26
Aug. 3.	Uniontown, Pa.	July 19
Aug. 3.	Greenville, Miss.	July 19
Aug. 3.	Indianapolis, Ind.	July 26
Aug. 3.	Fond du Lac, Wis.	July 26
Aug. 3.	Cincinnati, O.	July 26
Aug. 6.	Clifton, Ariz.	July 12
Aug. 6.	Kittanning, Pa.	July 26
Aug. 6.	Tunica, Miss.	July 26
Aug. 6.	Cincinnati, O.	July 26
Aug. 6.	California	July 26
Aug. 6.	Poplar Bluffs, Mo.	July 26
Aug. 6.	Indiana	July 26
Aug. 7.	Indiana	July 26
Aug. 7.	Wallace, Idaho	July 26
Aug. 7.	Indiana	July 12
Aug. 7.	Houston, Tex.	July 19
Aug. 7.	Huntsville, Tex.	July 19
Aug. 7.	Pennsylvania	July 19
Aug. 7.	Camden, N. J.	July 26
Aug. 7.	Paterson, N. J.	July 26
Aug. 7.	Billings, Mont.	July 26
Aug. 8.	Santa Ana, Cal.	July 19
Aug. 8.	Indianapolis, Ind.	July 26
Aug. 8.	Indiana	July 26
Aug. 9.	South Bend, Wash.	July 26
Aug. 10.	Indiana	July 26
Aug. 10.	Uniontown, Pa.	July 26
Aug. 11.	Indiana	July 26
Aug. 13.	Lewiston, Idaho	May 24
Aug. 13.	Ashland, Ala.	July 26
Aug. 13.	Indiana	July 26
Aug. 13.	Centerburg, O.	July 26
Aug. 14.	New Bedford, N. J.	July 19
Aug. 14.	Pennsylvania	July 26
Aug. 16.	Hamlin, W. Va.	July 12
Aug. 20.	Indiana	July 26

INDUSTRIAL WORKS

Aug. 1.	St. Petersburg, Fla.	July 5
Aug. 1.	Bennington, Vt.	July 26
Aug. 6.	Mottville, Mich.	July 26
	Adv. July 26.	

EXCAVATION AND DREDGING

July 30.	Walker, Minn.	July 12
July 30.	Winamac, Ind.	July 19
July 31.	Susanville, Cal.	July 12
July 31.	Central Islip, N. Y.	July 19
	Adv. July 19.	
Aug. 1.	Sac City, Ia.	July 12
Aug. 3.	Lebanon, O.	July 19
Aug. 3.	Rockwell City, Ia.	July 26
Aug. 4.	Cadwell, Ill.	July 26
Aug. 4.	Marshall, Minn.	July 26
Aug. 5.	New Ulm, Minn.	July 26
Aug. 6.	Paxton, Ill.	July 26
Aug. 7.	Ft. Madison, Ia.	July 26
Aug. 7.	Jersey City, N. J.	July 26
Aug. 9.	Centre City, Minn.	July 26
Aug. 10.	Lewiston, Ill.	July 26
Aug. 20.	Des Moines, Ia.	July 26

BUILDINGS

Bids Close		See Eng. News-Record
July 30.	Ft. Wayne, Ind.	June 28
July 30.	Washington, O.	July 26
July 31.	Ft. Wayne, Ind.	July 5
July 31.	Boardman, Ore.	July 26
Aug. 1.	Stillwater, Okla.	July 12
Aug. 1.	Ft. Wayne, Ind.	July 12
Aug. 1.	Cushing, Okla.	July 19
Aug. 1.	Warroad, Minn.	July 19
Aug. 1.	Trenton, Mo.	July 26
Aug. 2.	Springfield, O.	July 26
Aug. 3.	Columbus, O.	July 26
Aug. 3.	Lebanon, O.	July 26
Aug. 4.	St. Paris, O.	July 26
Aug. 4.	Glendora, Cal.	July 26
Aug. 4.	Durham, N. H.	July 26
Aug. 6.	Cheyenne, Wyo.	July 19
Aug. 6.	Santa Barbara, Cal.	July 19
Aug. 7.	New York, N. Y.	July 26
	Adv. July 26.	
Aug. 7.	Youngstown, O.	July 26
Aug. 8.	Great Bend, Kan.	July 19
Aug. 9.	Loveland, O.	July 26
Aug. 10.	Fall River, Mass.	July 26
Aug. 10.	Bedford, O.	July 26
Aug. 13.	Mason City, Ia.	July 26
Aug. 17.	Cohoes, N. Y.	July 26
Aug. 20.	Troy, N. Y.	July 12
Aug. 22.	Greensboro, N. C.	July 26
Aug. 24.	New Brunswick, N. J.	July 26
Sept. 10.	El Paso, Tex.	July 26

FEDERAL GOVERNMENT WORK

July 30.	New York, N. Y.	July 12
July 30.	Keyport, Wash.	July 12
July 30.	San Antonio, Tex.	July 12
July 30.	Newport, R. I.	July 12
July 30.	Melville, R. I.	July 26
July 31.	Chardon, Neb.	July 5
Aug. 2.	San Francisco, Cal.	July 26
Aug. 2.	Buffalo, N. Y.	July 26
	Adv. July 26.	
Aug. 3.	Winchester, Mass.	July 5
Aug. 6.	Globe, Ariz.	July 5
Aug. 6.	Charleston, S. C.	July 26
Aug. 11.	St. Louis, Mo.	July 26
Aug. 14.	West Point, Ga.	July 12
Aug. 17.	Washington, D. C.	July 12
Aug. 21.	Grand Haven, Mich.	July 26
	Adv. July 26.	
Aug. 30.	Franklin, Pa.	July 26
	Adv. July 26.	
Sept. 5.	Torrington, Wyo.	July 26
	Adv. July 26.	

MISCELLANEOUS

Aug. 3.	Embankment— Greenville, Miss.	July 26
Aug. 3.	Incinerator—Kansas City, Mo.	July 26
Aug. 6.	Air Compressors—Galesburg, Ill.	July 26
	Adv. July 26.	
Aug. 21.	Piers—Albany, N. Y.	July 26
	Adv. July 26.	
Aug. 22.	Tunnels—San Francisco, Cal.	July 19
	Adv. July 19.	

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. J., Cape May—Bd. Comrs. to sell $10,000 bonds extending and improving water mains and water plant. W. Porter, city clk.

N. J., New Brunswick—City to sell $117,000 bonds July 24, to purchase additional land to construct and equip new water supply system. E. F. Farrington, mayor.

N. J., Perth Amboy—Council authorizes $100,000 bond issue for extension and improvements to water-works system; also for installing new machinery. J. Hanson, Jr., city clk. A. H. Crowell, supt.

N. J., Roosevelt—See "Sewers."

Fla., Leesburg—City election soon to vote on $100,000 bonds as follows: Constructing water-works and light plant, $40,000; sewers, $40,000; street paving, $20,000.

O., Ashland—City to sell $11,000 bonds to construct water mains from Scott Well to water-works. R. H. Conn., city engr.

O., Chardon—Village rejected bids installing water-works as too high. R S. Parks, clk. Noted June 14.

O., Dayton—(Official)—City to sell $390,000 bonds Aug. 3, to extend water-works. H. Collins, supt.

Water-Works (Continued)

O., Lewisburg—City voted $10,000 bond issue to extend and improve water system. C. Wilson, supt. Noted June 28.

O., Marietta—City had plans prepared by Chester & Fleming, engrs., Union Bank Bldg., Pittsburgh, constructing Booster station and water tower tank at Fairview Heights. About $11,400.

Minn., Red Lake Falls—City to sell $18,000 bonds to install modern filter plant having capacity of 500,000 gal. per day.

Kan., Liberal—City had plans prepared for water-works improvement. About $27,500. E. T. Archer, & Co., 609 New England Bldg., Kansas City, Mo., engrs.

Neb., Alexander—City voted $10,000 bonds to construct water-works.

S. D., Bonesteel—City voted $14,000 bonds to improve water-works system; and $15,000 bonds for electric light system.

Mo., Hamilton—City plans to install water-works and sewerage systems. About $30,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, engrs.

Ark., Batesville—City Council authorized Bd. Comrs. to borrow $25,000 to improve water-works and lighting systems. W. H. Walkup, supt.

Ark., Tuxarkana—City to vote, Aug. 1, on $140,000 bonds for water-works extension. Address The Mayor.

Tex., Abilene—City election, Aug. 15, to vote on $230,000 bonds to be used in constructing Elm Creek water project. W. A. Rincy, city engr.

Tex., Mineral Wells — (Official) — City election, July 30th, to vote on bond issue to build water supply system, including lake, filters and about 5-mi. pipe line. W. W. McClendon, city engr.

Okla., Ada—City had plans prepared by Benham Eng. Co., 1300 Colcord Bldg., Oklahoma, for water-works improvement; including 36-in. rein.-con. flume, new intake, extension of mains, and 500,000-gal. tank on tower; also building sewage disposal plant.

Okla., Enid—City voted $50,000 bonds for water-works extension. F. W. Brooks, supt.

Okla., New Wilson—City voted $25,000 bonds for water-works improvements. Benham Engineering Co., Concord Bldg., Oklahoma, engrs.

Okla., Poteau—City plans water-works extension; bond election soon. About $125,000. Benham Eng. Co., 1300 Colcord Bldg., Oklahoma, engrs.

Okla., Tulsa—(Official)—City voted $675,000 bonds to extend and improve water system. Noted June 21.

Okla., Warika—(Official)—City sold $15,000 bonds to improve water supply. H. Freadwell, clk. Noted July 12.

Ariz., Globe—City having plans prepared by Benham Eng. Co., engrs., 1300 Colcord Bldg., Oklahoma, for constructing water-works and sewers. Bond election soon. About $435,000. J. F. Mayer, clk.

Wash., Pullman—See "Streets and Roads."

Wash., Seattle—Council will issue $3,700,000 bonds to improve water-works. Works includes impounding reservoir at Swan Lake, capacity 4,000,000,000 gal., conduit with capacity 150,000,000 gal. daily from Swan Lake, intake tower at upper end of conduit; conduit with capacity of 50,000,000 gal. daily to Volunteer Park; enlargement of Volunteer Park reservoir by addition of second basin to increase storage capacity to 60,000,000 gal., etc. L. B. Youngs, supt.

Cal., Santa Barbara—See "Reinforced Concrete."

Que., Grand Mere—City having plans prepared for installing new water-works pumps. About $10,000. C. Celonas, city engr.

Ont., Petrolia—City plans to install hydro electric water pumping system. About $20,000. J. Bright, city engr.

BIDS DESIRED

O., Akron—(Official)—Until Aug. 2, by C. F. Beck, dir. pub. serv., constructing and equipping filter plant extension, including, building and equipping 5 rapid filter units, 2,000,000 gal. daily capacity each, and about 1900 cu.yd. concrete masonry, etc.

O., Dayton—See "Reinforced Concrete."

Mo., Columbia—See "Reinforced Concrete."

Ont., Hamilton—Until July 30, by S. H. Kent, for 1 10,000,000-gal. steam turbine driven centrifugal pumping unit, 2 transformers, 1 synchronous motor, switching apparatus, 2 venturi meters, 2 water tube boilers, and 1 10,000,000-gal. motor driven centrifugal pump. About $127,000. E. R. Gray, city engr. Noted May 10.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Newark—Bd. W. Wks. let contract meter recording station for water system to F. McCue Constr. Co., 42 Market St., $12,496. Noted July 12.

★Wis., West Allis—City let contract improving water and sewerage systems to H. Hohensee, Humbold Ave. Bridge, Milwaukee. About $50,000. Noted June 21.

★Kan., Altoona—(Official)—City let contracts enlarging water and electric light systems, as follows: Connor Constr. Co., Kansas City, general contract, $10,000; Merkle-Hines Machinery Co., 508 Interstate Bldg., Kansas City, pumping equipment, hydrants and valves; Challenge Co., 1404 West 12th St., Kansas City, oil storage tank, 2-in. galvanized steel pipe and 1½-in. black pipe; Natl. Cast Iron Pipe Co., Kansas City, pipe; Pittsburgh Filter Mfg. Co., Farmers Bank Bldg., Pittsburgh, filter equipment. Noted July 12.

★Tex., Beeville—City let contract building electric light and waterworks plant to J. S. Fenner, Beeville, $55,000.

★Wash., Bremerton—Council let contract watermains in certain streets to W. H. Mitchell, Bremerton, $25,000. Noted June 14.

★B. C., Trail—City let contract water and sewer mains to Clay Products Co., Medicine Hat, Alta, $50,000.

SEWERS

Proposed Work

N. Y., Syracuse—See "Streets and Roads."

N. J., Haddonfield—Dept. Pub. Wks. having plans prepared by Remington & Vosbury, engrs., 6th and Market Sts., Camden, extensions to sewage disposal plant.

N. J., Roosevelt—Boro. plans building sewage disposal plant; also installing waterworks system.

N. J., Roselle—Boros. of Roselle and Linden plan to build joint sewerage system.

N. J., Trenton—Bd. City Comrs. authorize building sewers in Trent St. and Peake Alley. J. R. Fell., Jr., city engr.

W. Va., Charleston—City election soon to vote on $300,000 bonds to build trunk sewers. J. M. Clark, city engr.

Fla., Leesburg—See "Water-Works."

O., Cleveland—City plans to install sewers in East 97th, East 157th, St. Clair and Melvern Sts. R. Hoffman, city engr.

O., Lima—City plans to issue $155,000 bonds to pay its portion of installing relief trunk sewer in Lima sewer district. C. Bryson, city engr.

O., Youngstown—See "Streets and Roads."

Ill., Evanston—City Council passed ordinance to build sewer in newly annexed land in northwestern section of city. About $86,000. J. I. Bromer, city engr.

Minn., St. Paul—City had plans prepared constructing sewers on Hendon Ave., Bradley and Morton Sts., and Mount Curve Blvd. O. Claussen, city engr.

Kan., Baxter Springs—City plans to install sewerage system. A. C. Moore, 417 Frisco Bldg., Joplin, Mo., engr.

Neb., Wayne—City election, July 31, to vote on $30,000 bond issue to construct storm sewers.

Okla., Ada—See "Water-Works."

Okla., Tulsa—(Official)—City voted $80,000 bonds for extending sewerage system. F. Newkirk, aud.

Ariz., Globe—See "Water-Works."

Wash., Seattle—City had plans prepared for 2 sewerage systems to serve Rainier Valley; Empire Way system to cost, $300,000; Brighton Beach system $150,000 without laterals. H. W. Carroll, city engr.

Wash., Spokane—City had plans prepared for building sewer in Holmes School Dist. Bids soon. About $24,600. M. Macartney, city engr.

Cal., Los Angeles—City plans to repair outfall sewer at Hyperion Sta. About $119,000. A. C. Hansen, city engr.

Cal., San Diego—City plans storm sewer in 6th St. About $21,292. G. Cromwell, city engr.

BIDS DESIRED

N. Y., Brooklyn—Until Aug. 1, by L. H. Pounds, boro. pres., for installing sewers portions Vermont, Crosby, Miller Aves., Bulwer Pl., and Highland Blvd., cost, $25,293; also installing sewer basin portion Bedford Ave.

N. Y., Buffalo—Until Aug. 2, by Dept. Pub. Wks., for sewers in Ramsdell and Frank Ave., Greeley and Zittel Sts., consisting of 10- to 24-in. pipe. G. H. Norton, city engr.

N. Y., New York—(Official)—Until Aug. 7, by Bd. Water Supply, Municipal Bldg., furnishing and delivering gate and pressure-regulating valves, etc. G. Featherstone, secy.; advertised in this issue.

N. Y., White Plains—(Official)—Until Aug. 1, by Bronx Parkway Comn., building of connections between existing and proposed sewers and Bronx Valley Sewer, also diverting Bronx River; advertised in this issue.

O., Centerburg—Until Aug. 13, by N. Smith, village clk., building sanitary sewer, involving 5700 lin.ft. 6-in. and 1100 ft. 8-in. sewer pipe, together with necessary appurtenances. C. Anderson, city engr.

O., Lebanon—Until Aug. 14, by N. Gustin, village clk., for installing auxiliary sanitary sewerage system: work involves 2600 lin.ft. 15-in. vitr. sewer pipe and considerable quantity of other sizes, outlet trunk sewer, septic tanks, etc.

O., West Park—(Official)—Until July 30, by F. Feuchter, village clk., constructing sewers in portions of Cloverdale Ave., Vinton Row, and Lorain Ave. Noted Apr. 20.

Minn., Caledonia—(Official)—Until Aug. 7, by D. C. Merlo, village recdr., sanitary sewerage system, including 18,000-ft. 8- to 18-in. sewer tile, 5 to 25 ft. deep and sewage disposal plant. About $38,000. J. F. Druar, 314 Commercial Bldg., St. Paul, eng. Noted June 14.

S. D., Waterloo—Until Aug. 16, by City, building 7500 ft. of 10- and 12-in. sanitary lateral sewers. H. C. Wood, clk. W. F. Cockran, city engr.

Ark., Dardanelle—(Official)—Until Aug. 8, by comrs. Sewer Dist. No. 1, for 7½ mi. vitr. pipe sewers, 6 to 30-in. diam. Ford & Mac Crea, 325-326 Gazette Bldg., Little Rock, engrs.

Okla., Commerce—(Official)—Until July 30, by City for system of sanitary sewers; advertised in this issue. Noted July 12.

Utah, Salt Lake City—Until July 31, by City, for building sewer Extension No. 372, portions of Harrison Ave. Cannon, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., Newark—Passaic Valley Sewerage Comn. received low bids foundations and connections Wallington pumping station from Carrington Constr. Co., Prior St., Jersey City, $124,490; L. L. Brown Co., 30 Church St., New York City, $124,650; Linde & Griffith Co., 4th Ave., $137,770. Noted June 7.

★N. J., Newark—Passaic Valley Sewerage Comn. let contract foundations and connections Yantacaw pumping station, Clifton, to J. F. Shanley Co., 31 Clinton St., $93,675. Noted May 24.

★Tenn., Chattanooga—City let contract Orange Grove storm sewer to Noll & Son, 8 East 6th St., $11,001.

O., Cleveland—(Official)—City received low bid installing sewers in Pratt Ave. extension from W. McDowell & Son Co., Cleveland, $55,294; East 119th St. from River Constr. Co., 1210 Mayfield Rd., Cleveland. $16,543; Euclid Ave., from D. Zullo, Cleveland, $7493. Noted June 21.

★Wis., Beloit—City let contract 8½ mi. sanitary sewers in Dist. B and C to Logan & Giertz, Elgin, Ill., $51,353.

Sewers (Continued)

★**Wis., Neenah**—(Official)—City let contract installing 5300 lin.ft. sanitary sewers to Kispert & Hendricks, Kaukauna, $10,558. Noted June 28.

★**Wis., Superior**—City let contract constructing main sewer in Wisconsin Ave. and lateral sewers in adjoining alleys to Riches & Son, $10,432. Noted Apr. 26.

★**Ia., Spirit Lake**—(Official)—City let contract sewerage system and sewage disposal plant, involving 10½ mi. sewers, Imhoff tank, dosing chamber, sludge bed, and filter beds to Dearborn Constr. Co., Waterloo Savings Bldg., Waterloo.

★**Mo., Mexico**—(Official)—City let contract sewage disposal plant and outfall sewers to O'Neil Constr. Co., Leavenworth, $13,425. Noted Apr. 19.

★**Tex., Graham**—(Official)—City let contract installing sewerage system and sanitary disposal plant to Winslett Eldridge Co., 1001 Main St., Dallas, $23,500. Noted June 28.

Okla., Ada—City received low bids installing sewers, from Tolbert Constr. Co., Muskogee, $24,100; James Constr. Co., Guthrie, $24,125; T. McCormick, Oklahoma, $24,265. Noted June 21.

Wash., Seattle—City received low bid for building sewers in West and North 45th Sts., from Florito Bros., 1630 25th Ave., S., $17,048.

★**Ore., Portland**—City received low bid installing vitr. pipe for 50th St., S. E., and 31st Ave., S. E., sewerage systems, from J. F. Shea, 6 North 2nd St., $23,531; cement pipe from J. Keating, Lumbermens Trust Co., 5th Ave. and Stark St., $25,810. Noted June 21.

★**Cal., Fresno**—City let contract sewerage system consisting of 6-, 8-, 10- and 12-in. vitr. pipe, 48 manholes, etc., in Arlington Heights, to Thompson Bros., Fresno, $30,000.

★**B. C., Trail**—City let contract waterworks to Bianco & Maglio, $26,387. Noted June 7.

STRUCTURAL STEEL WORK

Proposed Work

Mass., Boston—Metropolitan Park Comn. rejected bids building bridge over Neponsit River between Boston and Quincy. Temporary bridge will be constructed. Noted July 12.

N. J., Belmar—Bd. Freeholders, Freehold, plan to build bridge over Shark River here. G. D. Cooper, Red Bank, co. engr.

N. J., Newark—Lehigh Valley R.R. submitted plan to city for building steel bridge over tracks on Ave. R. About $185,000 of which railroad will pay $100,000 and city balance. M. R. Sherrard, city engr. E. B. Ashby, New York City, ch. engr. R.R.

N. J., Weston—Philadelphia & Reading Ry. plans to improve bridges at Weston and Belle Meade. S. T. Wagner, Phila., ch. engr.

Pa., Scranton—Council voted $90,000 bonds to build bridge over Roaring Brook, between Harrison and Crown Aves. W. A. Schunk, city engr.

La., White Sulphur Springs—County plans to build steel bridge over Little River, also concrete bridges over important streams. About $100,000. Address Co. Clk., Jean.

O., Lima—See "Streets and Roads."

Okla., Holdenville—County voted $34,000 bonds to build bridges, Wetumka Twp.

Okla., Lehigh—See "Streets and Roads."

Okla., Tulsa—City voted $40,000 bonds to build north approach to Arkansas River bridge and $30,000 to build and repair viaducts and subways. F. Newkirk, aud. Noted June 21.

Ore., Portland—Co. Comrs. plan to build bridges over Beaver Creek. About $17,000.

Cal., Los Angeles—Bd. Pub. Wks. soon lets contract bridge over Los Angeles River on Brand Blvd., creosoted piles, asphalt paved plank floor. About $18,514.

Cal., Santa Barbara—Bd. Supervs. plan to build Honda and Refugio Bridges on Santa Barbara Gaviota Highway. About $80,000.

BIDS DESIRED

N. Y., Albany—(Official)—Until Aug. 21, by W. W. Wotherspoon, supt. pub. wks., building substructure, superstructure and approaches of bascule bridge over Tonawanda Creek, Tonawanda and North Tonawanda, N. Y., also highway bridge over Lock 27, Clyde River, Lyons, N. Y.; advertised in this issue.

W. Va., Fairmont—Until Aug. 14, by County, building Paw Paw Creek and Benefield Fork bridges. A. G. Martin, clk

Wash., Vancouver—Until Aug. 9, by Co. Comrs., building 90-ft. truss bridge near Dole and 1 72-ft. bridge over Lewis River near Yacolt.

Ore., Monument—Until Aug. 1, by Co. Comrs., Canyon City, building 180-ft. Howe Truss span over north fork of St. John Day River, concrete piers, 250-ft. timber approaches.

Ore., Portland—Until Aug. 9 by M. R. Haack, co. aud., building 72-ft. truss bridge over Lewis River.

Cal., Rio Vista—Until Aug. 6 by Bd. Supers. Sacramento and Solano Cos., at Sacramento, for bascule bridge over Sacramento River here. About $120,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Md., Baltimore**—Baltimore & Ohio R.R. let contract 1210-ft. bridge over Colgate Creek and Union Ry. & Electric Co. tracks to H. S. Kerbaugh, 50 Church St., New York City.

★**W. Va., Logan**—See "Streets and Roads."

★**N. C., Newton**—Catawba and Iredell Cos. let contract Island Ford, Terrell and Buffalo Shoals bridges over Catawba River to Virginia Bridge & Steel Co., Roanoke, Va.

★**O., Warren**—(Official)—Bd. Co. Comrs. let contract Huston Bridge on Rd. No. 101, Sect. "A," Newton Twp. to G. B. Shade & Son, Newton Falls.

★**Mont., Chinook**—Co. Comrs. let contract 17 bridges to Midland Bridge Co., 504 Midland Bldg., Kansas City, Mo.

★**Ark., Wynne**—(Official)—Rd. Improv. Dist. No. 1 let contract steel drawbridge over St. Francis River to Larimer & Burget Bridge Co., Memphis, $33,560. Noted May 31.

★**Tex., Lagrange**—(Official)—Co. Comrs. let contract for east approach to Colorado River Bridge to Wessels & Letzerich, La Grange, $20,650. Noted June 28.

★**Washington**—(Official)—State Highway Comn., Olympia, let contract Kalma River bridge to R. E. Mieth, Yeon Bldg., Portland, $25,390. Noted June 28.

★**Wash., Wenatchee**—Co. Comrs. let contract rebuilding steel bridge over Wenatchee River to C. G. Huber, Central Bldg., Seattle, $16,000.

★**Oregon** — (Official) — State Highway Dept., Salem, let contract building intercounty bridge between Marion and Polk Cos. to Coast Bridge Co., Ry. Ex. Bldg., and R. Wakefield, Worcester Bldg., both of Portland; $230,000. Noted July 19.

★**Que., London**—See "Railways."

REINFORCED CONCRETE

Proposed Work

Pa., Phila—H. Belfield Co., 435 North Broad St., plans 5-story, 100 x 280 ft., rein.-con. factory at 19th and Cambria Sts., also 1-story, 100 x 280 ft., building and 1-story, 100 x 280 ft., foundry. W. Steele & Sons Co., 30 South 15th St., archts.

Pa., Phila.—D. Berg and P. Publicker plan 7-story, 80 x 140-ft. concrete and steel theatre and office building on Broad St. H. J. Krapp, 114 East 16th St., New York City, archt.

O., Troy—Co. Comrs. to sell $18,000 bonds Aug. 6 to build rein.-con. bridge over Stillwater River and $14,000 and $6300 bonds to build Hoke and Range Line Rds. Noted Apr. 12.

Ind., Terre Haute—See "Streets and Roads."

Mich., Detroit—R. G. Olde, c/o Reo Motor Car Co., Lansing, had plans prepared for 11-story, rein-con. mercantile building, about $750,000, Baxter, O'Dell & Halpin, 1024 Hammond Bldg., archts.

Wis., Milwaukee — Kellogg & Petit, Chamber of Commerce Bldg., retained J. M. Stewart & Co., elevator and mill engrs., 110 South Dearborn St., Chicago, to prepare plans and supervise construction of rein.-con. grain elevator, 500,000-bu. capacity on Chicago and North-Western Belt Line. About $250,000. W. G. Kellogg, genl. mgr.

Okla., Ada—See "Waterworks."

Cal., Santa Barbara—City had plans prepared constructing 1,000,000-gal., concrete lined reservoir at Monecito. A. B. Cook, city engr.

BIDS DESIRED

N. J., Camden—(Official)—Until Aug. 6 by County building 219 ft. rein.-con. bridge over Newton Creek. J. J. Alberton, co. engr.; advertised in this issue.

O., Dayton—(Official)—Until July 31, by J. E. Barlow, dir. pub. ser., building 10,000,000-gal. rein.-con. reservoir; advertised in this issue. Noted May 10.

Ill., Elgin—(Official)—Until Aug. 2, by W. F. Sylla, city clk., building concrete slab bridge over Fox River, Kimball St., former bids rejejcted; advertised in this issue. Noted July 5.

Ia., Maquoketa—(Official)—Until Aug. 2, by Co. Aud., building 3 trusses, 4 I-beams, 1 through girder, 3 sets of abutments and 14 box culverts, all to be rein-con. C. M. Fisher, co. engr.

Mo., Columbia—(Official)—Until Aug. 7, by J. S. Bicknell, city clk., for constructing rein.-con.-lined reservoir, including excav. and embankment, about $1,000,000 gal. capacity.

Tex., Houston—Until July 30, by E. B. Bonney, city secy., building rein.-con. wharf, foot of Main St. About $30,000. E. E. Sands, city engr.

Wash., South Bend—Until Aug. 9, by Co. Comrs., building 2 60-ft. rein.-con. bridges over Willapa River, Lebam Twp., 1 40-ft. span over Trap Creek, Nalpee Twp., 1 30-ft. span over Green Creek between Menlo and Holcomb Twps. C. S. Henry, co. engr.

Cal., Santa Barbara—Until Aug. 6, by C. A. Hunt, co. clk., building 1-story, 235-ft. county hospital with 2 wings 51 ft. long, rein.-con. About $50,000. R. F. Sauter archt. Noted July 19, under "Buildings."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston**—United Fruit Co., Bd. Trade Bldg., let contract 9-story, 80 x 197-ft. rein.-con. engine house and warehouse to Turner Constr. Co., 45 Milk St.

★**Mass., Greenfield**—Town let contract rein.-con. bridge over Green River to W. M. Bailey Co., 141 Milk St., Boston, $14,000.

★**N. Y., Long Island City**—Oakes Mfg. Co., Blackwell St., let contract 2-story, 60 x 80-ft. and 3-story, 32 x 100-ft. rein.-con. factories to Turner Constr. Co., 244 Madison Ave., New York City.

★**N. J., Hopewell**—Philadelphia & Reading R.R. let contract rein.-con. bridge over tracks on Greenwood Ave. to American Bridge Co., Widener Bldg., Phila. About $40,000. Noted June 7.

★**Pa., Phila.**—Pennsylvania R.R. let contract 2-story, 61 x 125-ft. rein.-con. packing plant at West Phila. Stock Yards to W. C. Doll Co., 201 North Broad St. About $120,000.

★**Pa., Phila.**—S. S. White Dental Mfg. Co., 12th and Chestnut Sts., let contract 4-story, 60 x 75-ft. rein.-con. factory, at 212 South Quince St., to Turner Concrete Steel Co., 1713 Sansom St.

W. Va., Fairmont—Bd. Affairs received only bid building rein.-con. bridge over Coal Run from J. F. Casey Contr. Co., Union Arcade, Pittsburgh, cost plus $18,150 in event of plans "A" being adopted, cost plus $15,600 in event of plans "B" being adopted. Noted July 12.

★**Ind., Marion**—(Official)—Co. Comrs. let contract rein.-con. bridge over Mississinwa River to E. R. Woover & Co., Marion, $33,424. Noted July 12.

★**Mich., Detroit**—Theater and Store—De Luxe Theater Co., let contract, 2-story, rein.-con. and steel, Kercheval Ave., to Baas Constr. Co., 263 Eliot St. About $100,000.

Ill., Danville—(Official)—Clunty received low bids building rein.-con. arch bridge, Sect. 6, Georgetown Twp. from P. McCully Constr. Co., Mackinaw, $19,500; M. & P. Constr. Co., Hatfield, Ind., $20,600; McCalman Constr. Co., Georgetown, $22,000. Noted July 12.

★**Ia., Mason City**—City let contract 194-ft. rein.-con. bridge on south Pennsylvania Ave. to Henkle & Brown, Mason City, $39,997.

★**Ariz., Clifton**—Town Council let contract rein.-con. bridge over San Francisco River to Midland Bridge Co., 504 Midland Bldg., Kansas City, Mo., $42,000. Noted June 7.

Reinforced Concrete (Continued)

★**Wash., Colfax**—Co. Comrs. let contract 55-ft. span rein.-con. arch bridge over Union Flat Creek, near La Crosse, to H. C. Malott, 6526 17th Ave. N.E., Seattle, $11,900. Noted July 12.

STREETS AND ROADS

Proposed Work

N. Y., Syracuse—Council authorized $244,000 bond issue for paving, sidewalks and sewer construction. H. C. Allen, city engr.

N. J., Camden—Bd. Freeholders plan building road near Atco and eliminating "death trap" of overhead bridge at that place. About $12,000. J. J. Albertson, Magnolia, co. engr.

N. J., Deal Beach—Boro. plans curbing and laying sidewalks on Pearl St. and Phillips and Brighton Aves. C. Conover, boro. clk.

N. J., Freehold—Bd. Freeholders soon lets contract paving 1½ mi. Freehold-Smithburg Rd., concrete.

N. J., Jersey City—City soon receives bids paving Sip and Summit Aves. asphalt or wood block. C. Van Kuren, city engr.

N. J., Newark—City passed ordinance to pave Summer Ave., asphalt. M. R. Sherrard, city engr.

N. J., Newark—City plans to pave portion Willoughby St., Bitulithic, 6-in. concrete foundation; South 16th St., 10-in. telford, sand foundation. M. R. Sherrard, city engr.

N. J., New Brunswick—City prepared plans paving, curbing, grading and regulating portion Remsen Ave., Comstock, Brown, Townsend and Condict Sts., vitr. brick, asphalt block or warrenite. A. Atkinson, city engr.

N. J., Passaic—Bd. Freeholders to sell Aug. 5, $251,000 bonds for improving 13 roads, asphalt and bituminous macadam. G. W. Botbly, clk.

N. J., Somerville—Bd. Freeholders plans to repair Union Ave., and Kingston-Franklin Rd. About $22,000. J. Doughty, Jr., co. engr.

Pennsylvania — State Highway Comn., Harrisburg, plans to build 1½-mi. brick road from Oil City to Rouseville. About $60,000. H. W. Claybaugh, asst. engr.

Pa., Carlisle—City plans election to vote on $140,000 bonds to pave streets, etc. J. T. Hiteshew, city engr.

Pa., Carnegie—Boro. Council plans paving Liberty Ave. and Doolittle St. and curbing and paving Chestnut St. O. B. Highley, city engr.

Pa., Pittsburgh—Co. Comrs. receive bids about Aug. 1, for widening Noblestown Rd. to make 24 ft. brick highway from city line to intersection of Dinsmore Rd., continuation of Dinsmore Rd. entailing widening of road to 21 ft.; also widening Noblestown Rd. for distance of 1¼ mi.

W. Va., Carlisle—Town election in November to vote on $50,000 bonds to pave streets.

W. Va., Wheeling—City voted $32,000 bonds for improving and paving various streets. C. B. Cooke, city engr.

N. C., Mt. Holly—Town plans to issue $10,000 bonds to build sidewalks, curbs and gutters, brick, stone, concrete or similar material. W. T. Johnston, clk.

S. C., Charleston—City plans paving Rutledge Ave. and Mill and Montague Sts.; also extending portion Felix St. About $47,790. J. H. Dingle, city engr.

Ga., Waycross—City Council passed ordinance for paving portions McDonald, Howe, Brewer and other streets. J. L. Youmans, city engr.

Fla., Leesburg—City election soon to vote on $100,000 bonds; $20,000 to be used for street paving. Address the Mayor.

Ala., Dothan—City had plans prepared by Heller & Mickle, Dothan for constructing 4½-mi. sand-clay road from here to Headland: also serveral concrete bridges.

Tenn., Clarksville—City plans paving portions Franklin and 3rd Sts., asphalt. S. R. Alexander, city engr.

Ky., Carrollton—City plans to build 3 concrete streets, Main, 5th and Court Sts.

Ky., Owensboro—County rejected bids completing road building program as too high. J. Weir, clk. Noted June 21.

O., Canton—County plans paving 2½ mi. Louisville-Ravenna Rd. with state aid. A. Sickafoose, co. surv.

O., Cincinnati—City soon lets contract paving Boudinot, Columbus, Davey, Glen Parker, Glen Armand, Kling, Laclede, Monteith, Minton, Central and Freeman Aves. and Concordia, Davoran, Haven, Tunnel and Terry Sts. F. Krug, city engr.

O., Cincinnati—City to issue $18,000 bonds for widening portion of Madison Rd. F. Krug, city engr. Noted June 7.

O., Cincinnati—Council passed ordinance to improve portions of Earnshaw and Hazlewood Aves. and Dayton St. F. Krug, city engr.

O., Elyria—City Council plans new highway through Foster Ave. from Elyria to South Lorain. About $35,000. C. M. Theobald, city engr.

O., Lima—City plans $45,000 bond issue for improving Elizabeth St. and building bridge over Ottawa River. C. Bryson, city engr.

O., Painesville—City to sell $2,000,000 bonds improving portions North St. Clair St. by grading, curbing and paving, brick on concrete foundation, also installing sewer and water mains. J. Crabbs, city engr.

O., Piqua—City passed ordinance to issue $13,450 bonds to pave certain streets. A. Schroeder, city engr.

O., Sandusky—City Comrs. plan $27,200 bond issue for paving Fulton, Adams and Division Sts. A. F. Johnston, city engr.

O., Steubenville—City plans paving portion Oregon Ave. J. M. Leech, city engr.

O., Toledo—City Council plans paving portion Water St., granite block. H. McKechnie, city engr.

O., Toledo—City election Sept. 2nd to vote on $508,000 bond issue for extending Summit St. from Perry St. to B'way. and diverting course of Swan Creek necessary to extend street. H. McKechnie, city engr.

O., Troy—See "Reinforced Concrete."

O., Youngstown—City to sell $32,000 bonds to pave portions Glenwood, and Mahoning Aves., Worthington and Thurman Sts., grade portion Florencedale Ave. and build sidewalks on portions of Alpine and Carlyle Sts., Donald, Helena, Indianola, Manhattan and Milton Aves.; also install sewers in Glenwood and Warren Aves. and Compbell St. F. M. Lillie, city engr.

Ind., Richmond—(Official)—County sold $48,000 bonds to improve Thomas G. Dunbar Highway, Center Twp. L. S. Bowman, aud. Noted June 28.

Ind., South Bend—City soon lets contract for paving portion Howard St. About $27,150. F. J. Anderson, engr.

Ind., Terre Haute—County soon lets contract paving portion 25th St., brick; also building Robert E. Gibbons' rein.-con. bridge over Lost Creek, Lafayette Rd. About $70,518 and $9700 respectively.

Ind., Terre Haute—County plans paving Ed. Sparks Rd., about $44,000.

Mich., Escanaba—City authorized repaving portions of Stephenson Ave., bitulithic, about $27,149; also resurfacing road between end of Harnett Ave. and Wells. W. J. Hodson, engr.

Mich., Pontiac—City plans sidewalks on portions Willard Ave., Whittemore, Osmun and Paddock Sts. W. J. Fischer, city engr.

Mich., River Rouge—City plans paving portions of Henry, Jefferson, Batavia, Burke, Victoria and other streets.

Ill., East Dubuque—City plans to pave 1st, Wall and other streets, tarvia, cement and asphaltic concrete. Tschirgi & Son, 712 American Trust Bldg., Cedar Rapids, Ia., engrs.

Ill., Kankakee—City soon lets contract paving portions East Court St., brick. About $52,370. R. D. Gregg, city engr.

Ill., Rockford—(Official)—Co. Bd. Supervs. soon lets contract paving 2-mi. on 11th St., concrete 18-ft. wide, 3-ft. macadam shoulders. About $49,000. A. R. Carter, co. supt. highways.

Ill., Springfield—Bd. Local improv. passed ordinance to pave portions of Vine St. and Woodland Ave., asphaltic concrete. About $27,994. W. D. Seeley, city engr.

Minn., Olivia—County plans to gravel Yellowstone Trail between here and Bird Island. A. Johnson, co. aud.

Kan., Hutchinson—City Comn. approved plans improving 1st Ave., E., North Madison St., streets in Hyde Park, North Washington, West Bigger, 18th 4th St. W. and 6th Ave. E. G. L. McLane, engr.

Neb., Omaha—City plans repaving 395 blocks. Address Comr. Parks., City Hall.

Neb., Wayne—County election, July 31, to vote on $30,000 bonds to pave streets and drain wet land.

N. D., Fargo—County having plans prepared by C. J. Estlund, asst. state engr., Bismark, building 17 mi. Meriden Rd.

Mont., Billings—County to sell $175,000 bonds building permanent highways. F. E. Williams, co. clk.

Mo., Caruthersville—City plans paving, grading and curbing portions West 6th St., tarvia filled macadam with concrete curbs and gutters. J. M. Ginnis, clk.

Mo., Kansas City—County rejected bids resurfacing and macadamizing Kansas City-Independence Rd. Noted July 19.

Arkansas—State Highway Comn., Little Rock, prepared plans estimating cost building 15-mi. road from Ft. Smith to Greenwood, 9 mi. from Harrisburg to Truman, Rd. Improv. Dist. No. 4, at $75,000 and $68,000 respectively; 23 mi. from Lake City to M. Missouri state line, Rd. Improv. Dist. No. 6, $148,000; 13 mi. from Pulaski co. line to Carlisle, $86,000.

Ark., Des Arc—County prepared plans 10-mi. road from Mesa to Carlisle, Rd. Improv. Dist. No. 5. About $59,000.

Ark., Forrest City—County plans to spend $400,000 building roads in Dists. Nos. 1 and 2.

Ark., Mena—City plans paving portions Porth Arthur Ave. and Neine St. M. Martin, clk.

Ark., Newport—County plans 52-mi main line rock road and 8 mi. lateral road in Rd. Dist. No. 2; $25,000 bond issue voted for work.

Tex., Austin—Attorney General's Dept. approved $40,000 bond issue to pave and improve Plainview St. M. C. Welborn, city engr.

Tex., Dallas—County election, Aug. 31, to vote on $1,000,000 bonds to construct permanent hikhways.

Tex., Eastland—County election, Aug. 10, to vote on $130,000 bonds to build roads, Rd. Dist. No. 1. Noted Apr. 5.

Tex., Franklin—County voted $20,000 bond issue for improving and repairing roads and bridges.

Tex., Paducah—County election soon to vote on $400,000 bonds issue to build roads.

Tex., Pittsburgh—County election Aug. 6, to vote on $35,000 bonds to construct roads in Dist. No. 2. Noted May 31.

Tex., Plainview—State Atty. General's Dept., Austin, approves $40,000 bond issue to pave streets.

Tex., Port Lavaca—County election, Aug. 14, to vote on $75,000 bond issue to build roads in Rd. Dists. Nos. 1 and 2.

Tex., Stephenville—County plans election to vote on $100,000 bond issue for improving roads.

Tex., Wolfe City—City election Aug. 11, to vote on $100,000 bonds to construct roads.

Okla., Lehigh—County election soon to vote on $650,000 bonds to build roads and bridges.

Ariz., Globe—County to spend $154,705 building roads; ElCapitan highway included in project will cost $75,000.

Wash., Bellingham—County plans to spend $45,000 to pave and improve Pacific Highway between Bellingham and Everett.

Wash., Port Angeles—Co. Comrs. rejected bids clearing, grading, grubbing, bridging and graveling Permanent Highway No. 7. New bids soon. A. U. Blackwood, co. engr. Noted June 21.

Wash., Pullman—County rejected bids paving 8000 sq.yd. and extending water system in College Park addition. New bids. About $15,000. Noted June 28.

Wash., Seattle—City plans to pave and grade Empire Way, cost, $262,425; concrete sidewalks Thorndyke Ave. et al, $40,000. A. H. Dimock, city engr.

Wash., Spokane—City rejected bids paving and grading portion Mallon Ave. About $23,500. M. Mac Cartney, city engr. Noted July 19.

Oregon—State Bd. Control, Salem, plans to issue $400,000 bonds to match federal appropriation for highway work in state.

Cal., Corcoran—City receiving bids in August paving 15 blocks on Whitly Ave., macadam.

Cal., San Diego—City prepared plans paving portion National Ave. About $15,720.

Streets and Roads (Continued)

Cal., Santa Barbara—Bd. Supervs. appropriated $50,000 bonds to build Cuyama Rd. Federal Government to bear part of cost of work.

Cal., Santa Barbara—La Mesa Permanent Road Assn., plans paving La Mesa Rd. from city limits to Arroyo Burro, thence Modoc Rd. to beach at mouth of the Arroyo. About $50,000. R. Wheeler, secy.

Que., Portinuf—Town soon lets contract paving 2-mi. macadam roads. A. Babin, engr.

Que., Shawinigan Falls—Town soon lets contract building highways. About $43,000. J. E. Meunier, secy.

Que., Three Rivers—City plans to pave streets, asphalt, and build highways. About $20,000 and $22,000 respectively. Z. Lambert, engr.

Ont., Steelton—City plans new concrete sidewalks. About $14,500. J. Robinson, city clk.

Sask., Regina—City plans laying pavements to cost about $47,000. A. W. Haddow, city engr.

B. C., South Vancouver—City received $10,000 from Provincial Government to improve Fraser Ave.

BIDS DESIRED

Vt., Barre—(Official)—Until July 30, by City, paving portion South Main St. F. O. Lee, city engr.; advertised in this issue.

N. Y., Buffalo—Until Aug. 2, by Bd. Pub. Wks., paving Columbia St., 40-ft. wide, Walnut St., 30-ft. wide, Burton, Allen and Hamburg Sts. G. A. Norton, city engr.

N. Y., New York—(Official)—Until Aug. 1, by Bronx Parkway Comn., paving portion Bronx River Pkway. J. Downer, engr. and secy.; advertised in this issue.

N. J., Camden—Until Aug. 7, by F. B. Lewallen, boro. clk., for building macadam streets with hot liquid asphalt surface and concrete gutters. J. C. Remington, Jr., 601 Market St., boro. engr.

N. J., Kenilworth — Until July 30, by Common Council for resurfacing boulevard 3880 sq.yd. macadam top and bituminous surface. J. W. Higgins, 52 Vanderbilt Ave., New York City, boro. engr.

N. J., Paterson—(Official)—Until Aug. 7, by Bd. Wks., paving Goodwin, Madison, Deremus, Temple, North 40th and Lyons Sts. and various avenues. H. J. Hardes, city engr. Noted July 12.

N. J., South River—Until July 30, by Bd. Freeholders for 10,327 sq.yd. pavement on Main and Ferry Sts. and Causeway. A. W. Bissett, clk.

Pennsylvania—(Official)—Until Aug. 14, by F. B. Black, state highway comr., Harrisburg, for road work as follows: Clarion Co., 14,126 ft. vitr. block, Clarion and Paint Boro.; 22,101 ft., Westmore, Boro.; Somerset Co., 6675 ft., Somerset Boro., Centre Co., 2454 ft., Bellefonte Boro., Venango Co., 7857 ft., Cornplanter Boro., Beaver Co., 23,546 ft. rein.-con., White and Big Beaver Boro.

Pa., Kittanning—Until Aug. 6, by Boro. Council, for grading, curbing and paving McKean Way Water Alley, Jefferson Alley and Walnut St. W. H. Mast, Keystone Bldg., boro. engr.

Pa., Uniontown—Until Aug. 10, by H. Kissinger, co. controller, furnishing and applying 6500 gal. asphalt on road from boro. line of Fayette City to bridge over Pittsburgh & Lake Erie tracks toward Wickhaven in Washington Twp.; also furnishing and applying 1800 gal. asphalt on road from Gillespie towards Brownsville in Washington Twp.

Ala., Ashland—Until Aug. 13, by Co. Comrs., grading and surfacing road between Lineville and here. W. G. Keller, state highway engr.

Miss., Tunica—Until Aug. 6, by Bd. Supervs., for building 41-mi. gravel road. W. Nicholas, pres. Y. W. Mashburn, Clarksdale, engr.

O., Cincinnati—Until Aug. 3, by Co. Comrs., improving portion Cooper Ave., Sycamore Twp., waterbound macadam.

O., Cincinnati—Until Aug. 6, by Bd. of Trustees of Cincinnati Southern Ry., Ingalls Bldg., for grading and paving Front St., in connection with building railroad track, granite paving and curbing and concrete sidewalks.

O., Toledo—Until July 31, by City, for repaving portions of Oak and Dorr St. and Stickney Ave. H. McKechnie, city engr. Noted June 7.

Indiana—By Co. Comrs. for building roads as follows: July 31: **Indianapolis**; gravel road Warren Twp. L. K. Fesler, aud. Aug. 6: **Rushville**; gravel road, Posey Twp. W. H. McMillan, aud. Nashville; gravel road, Hamblin Twp. O. Morrison, aud. Valparaiso; 2.07 and 2.02-mi. road, Center Twp. C. A. Blachly, aud. Franklin; gravel road, Blue River Twp. J. C. Gregg, aud. Evansville; 2 roads, Knight Twp. C. P. Beard, aud. South Bend; cement road, Penn Twp. A. F. Wolf, aud. Cannelton: macadam road, Troy Twp. M. C. Conway, aud. Aug. 7: Wabash: 2 roads, Chester Twp. F. P. Kircher, aud. Aug. 7 Bluffton; building stone streets, Uniondale and Petroleum Twps. C. T. Kain, aud. Columbus; 11,-71½-ft. gravel road, Flatrock Twp. W. H. Scott, aud. Brazil; stone and gravel road on line between Posey and Perry Twps. W. O. Graesser, aud. Kokomo; stone road, Clay Twp. W. L. Benson, aud. Rensselaer; stone roads, Carpenter and Marion Twps. J. P. Hamilton, aud. Bloomfield; macadam road, Richland Twp. G. E. Kidd, aud. Aug. 8: **Lafayette**; gravel road, Laramie Twp. G. W. Baxter, aud. Rockville; gravel roads, Penn and Adams Twps. C. Davis, aud. Lafayette; 2.83-mi. and 2.39-mi. brick road, Fairfield, Twp. G. W. Baxter, aud. Aug. 10: Corydon; 17,142-ft. stone road, Franklin, Harrison and Jackson Twps. S. C. Mauck, aud. Aug. 11: Vernon: crushed stone road, Center Twp., bituminous binder roads, Vernon and Center Twps. G. J. Bernhart, aud. Aug. 13: South Bend; 2 gravel roads, Penn Twp. A. F. Wolf, aud. Aug. 20: Huntington; gravel road, county line. O. E. Eviston, aud.

Ind., Indianapolis—(Official)—Until Aug. 8, by Bd. Pub. Wks., improving portion roadway St. Clair St., wood block, asphalt, bitumbinous concrete or brick. B. J. T. Jeup, city engr.

Wis., Fond Du Lac—Until Aug. 3, by City Clk., paving and grading portion Oshkosh Rd., rein.-con. base of 3½- to 5-in. concrete and 1½-in. cement sand and granite wearing surface. J. S. McCullough, engr.

Minn., Center City—Drainage—Until Aug. 9, by A. F. Stromgren, co. aud., clearing 46 acres, grubbing 21.8 acres, grading 122,-621-cu.yd. side ditching, 10,717-cu.yd. off-take ditching, 34,020-cu.yd. gravel surfacing, 37,702-cu.yd. clay surfacing, etc.

Mont., Billings—(Official)—Until Aug. 7, by J. M. Bresnahan, city clk., 18,000 sq.yd. asphaltic concrete, bitulithic, concrete or asphaltic macadam, concrete gutters, storm sewer, etc. About $54,000. E. M. Sneckenberger, city engr.

Mo., Poplar Bluff—Until Aug. 6, by E. C. Thomas, city engr., 10,394 sq.yd. pavement, 6- and 5-in. bituminous, 1811 cu.yd. grading, 5848-ft. curbing. About $20,000.

Mo., Richmond—Until July 31, by City, for 6000 yd. brick block paving and 2900 ft. curbing. W. H. Kirham, city engr.

Ida., Wallace—Until Aug. 7, by D. H. DeLong, city clk., paving certain streets and alleys. About $50,000.

Wash., South Bend—Until Aug. 9, by Bd. Co. Comrs., for clearing, grubbing, grading, draining and furnishing crushed rock macadam surface over 1½-mi. Columbia-North Bank Highway, from Chinook to River Bridge. S. B. Henry, co. engr.

California—(Official)—Until Aug. 6, by State Highway Comn., 515 Forum Bldg., Sacramento, paving 9.3-mi. from El Capitan Creek to Alcatraz (V-SB-2-F) and 7.7-mi. from Elwood to El Capitan Creek (V-SB-2-G) Santa Barbara Co., Portland cement concrete. A. B. Fletcher, highway engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. H., Claremont—City let contract paving Main and Pleasant Sts., involving about 8000-sq.yd. pavement, 2000 lin.ft. concrete curb, 1000-ft. sewers to Rolie Consolidated Concrete Co., 936 Elm St., Manchester, $22,679. Noted June 14.

★Massachusetts—State Highway Comn., Boston, let contract surfacing 7500-ft. state highway in Lincoln Twp. to R. F. Hudson, Melrose. About $30,000.

★Massachusetts—State Highway Comn., Boston, let contract building section highway in Washington Twp., to Suzio Constr. Co., State and Brooks Aves., Meriden, Conn., $109,899. Noted July 5.

★Mass., Boston—City let contract asphalt pavement to Central Constr. Co., 228 Southampton St., Roxbury, $119,975.

Mass., Dorchester—City received low bids for granite block paving on Dorchester Ave., from J. Doherty, 133 Calumet St., Roxbury. About $40,335.

★Mass., Dorchester—City let contract artificial stone sidewalks on Adams, Belfort, King and Rosemont Sts. and Dorchester and Neponset Aves., to D. M. Biggs & Co., 60 Marsh St. About $24,741.

★Mass., Peabody—City let contract building tar macadam roadway to A. G. Tamasello, 69 Gibson St., Dorchester. About $35,000.

★R. I., Providence—City let contract 13,-000 yd. asphalt pavement, Chalkstone Ave., to Warren Bros., 142 Berkeley St., Boston, $30,000.

N. Y., Brooklyn—L. H. Pounds, boro. pres., received low bids improving Prospect Plaza from Brooklyn Alcatraz Asphalt Co., 2306 Creston Ave., New York City, $52,543; Borough Asphalt Co., 1301 Metropolitan Ave., $54,473; Cranford Co., 190 Montague St., $56,333.

★N. Y., Moravia—Village let contract paving to Soper & Son, Seneca Falls. About $10,299.

★N. Y., Olean—(Official)—City let contract paving portions 9th St., brick, to Loomis & King, Central Trade Bldg., Altoona, Pa., $16,196. Noted June 28.

★N. Y., Rochester—City let contract paving Genesee Rd. to Whitmore, Rauber & Vicinus, 279 South Ave. About $104,406. Noted July 12

★N. Y., St. Johnsville—(Official)—City let contract 12,000 sq.yd. bituminous pavement on concrete foundation, and about 2000 ft. 18- and 20-in. storm sewers on North Division and Center Sts., to C. E. Weed Co., Albany, $40,122. Noted June 28.

★N. J., Belvidere—Bd. Freeholders let contract resurfacing 5-mi. Blairstown-Columbia Rd. to Salmon Bros., 526 Elm St., Arlington, $37,529. Noted June 28.

★N. J., Elizabeth—County let contract repaving portion Terrill Rd., amiesite, involving 1248 tons bituminous concrete, 306-lin.ft. french underdrain grading, 9359 lin.-ft. gutters and shoulders to C. H. Winans Co., 207 Broad St., $17,821. Noted July 12.

★N. J., Montclair—City let contract paving Bellville Ave. and Park St., Warrenite, to Standard Bitulithic Co., Essex Bldg., Newark, $71,706 and $197,854 respectively.

★N. J., Mt. Holly—Bd. Freeholders let contract paving road from Pemberton to Lewistown, concrete, 1½ mi., to Utility Constr. Co., 46 Paterson St., New Brunswick, $36,273: Mt. Holly to Chambers Corner, asphalt, 3 mi., Eastern Paving Co., Penn Sq. Bldg., Phila., $42,102. Noted July 19.

N. J., New Brunswick—Bd. Freeholders received low bid paving Main, Ferry, Causeway and South River Sts.; also New Brunswick-Old Bridge Turnpike from T. H. Riddle, 102 Church St., $63,100 and $27,-838 respectively. Noted June 14.

★N. J., Paterson—(Official)—City let contract paving portion Dale Ave., granite block, to L. Cramer, 99 Ward St., $11,000. Noted July 12.

★N. J., Princeton—Boro. let contract rebuilding 11,273 sq.yd. Stockton St., Warrenite surface, to Reardon Co., Princeton. About $34,634. Noted July 12.

★Pa., Lebanon—City let contract paving 5th, 6th, 7th, and New Sts. to Mangan, Pugh & Dolan, Pottsville, $41,699.

★Pa., Sharon—City let contract paving portion State St., wood block, to W. McIntyre & Sons, South Irvine Ave., $4.66 per sq.yd.

★Md., Cumberland — City let contract paving portions 7 streets, involving 18,000-sq.yd. concrete paving and 900 lin.ft. concrete curb to W. H. Robertson, Bay 35th St., Brooklyn, N. Y. Noted June 28.

Md., St. Michaels—City received low bid concrete road from here to Claiborne, from Shaffer & Williams, Easton. About $30,000.

★Va., Norfolk—City let contract paving Queen St. to Lawson Constr. Co., Essex Bldg. About $17,000.

★W. Va., Fairmont—County let contract building 15-mi. improved roads and streets to Meredith Constr. Co., Fairmont. Noted May 24.

Streets and Roads (Continued)

★W. Va., Logan—County let contract building dirt road, bridges and culverts from Holden to Blair, 14-mi. to Hunt-Forbes Constr. Co., Logan. About $200,-000.

★W. Va., Winfield—County let contract 4-mi. concrete highway to Miller Constr. Co., Gallipolis, O.: Brown & Floyd, Charleston; Duvall Bros., Huntington; Ohio Valley Constr. Co., Point Pleasant, $1.80 per sq.yd.

★Fla., Panama City—Co. Comrs. let contract building roads to Maxon-Smith & Co. and Jordan & Phillips, Montgomery, Ala., $140,000; road and bridge work to T. B. Young, Snead, $130,000 and $30,000 respectively.

★Fla., St. Augustine—Bd. Co. Comrs. let contract furnishing 700,000 paving bricks to be used in building 4-mi. St. Augustine Rd. No. 2 to J. Y. Wilson, Clarke Bldg., Jacksonville, $20.25 per M.

★Ala., Bessemer—(Official)—City let contract paving 2nd Ave. to Sullivan, Long & Hagerty, Bessemer, $2.25 per sq.yd.

★Ala., Gadsden—City let contract paving portions Montgomery Ave., 5th and Walnut Sts. to J. F. Morgan & Co., Gadsden, $28,-916.

Ala., Selma—(Official)—City received low bids paving 25,000 sq.yd. Alabama and Selma Aves., asphalt, asphaltic concrete, bitulithic or brick, from Jamison & Hallowell, Dunn Constr. Co., Chahmber Commerce Bldg., Birmingham; Alabama Paving Co., Amer. Trust Bldg., Birmingham. W. R. Crisman, city engr. Noted June 28.

Tenn., Erwin—(Official)—City received low bid paving and grading 14,000-sq.yd., concrete curb and gutter, sidewalks; also installing storm sewers with sanitary house connections from Murray Constr. Co., Holston Natl. Bank Bldg., Knoxville. Noted June 21.

★Ky., Carrollton—City let contract paving, including excavation and curbing, concrete, portions Main, 5th and Court Sts., etc., to Masters Constr. Co., Seymour, Ind., $2.40 yd.

★Ky., Danville—(Official)—Bd. Council let contract improving portion Main St. to Federal Asphalt Paving Co., Hamilton, O., $24,000. Noted June 21.

★Ky., Winchester—County let contract building 6 mi. state aid road to B. S. Haggard, Winchester.

★O., Akron—County let contract paving portion Wolf Ledge Run to E. & W. Mashaffery, $63,000.

★O., Ashtabula—County let contract to T. P. Fitzgerald for paving 5¼ mi. of Ashtabula-Plymouth Rd. About $106,568.

★O., Columbus—Co. Comrs. let contract improving Starrett Rd., Clinton Twp., and macadamizing Phillipi Rd., Franklin Twp. to T. Vogelberg, Columbus, $9648 and $11,-103 respectively; paving 1 mi. Agler Rd., Mifflin Twp., brick to A. W. Burns Co., 55 East State St., $62,527.

★O., Dayton—City let contract paving portion of Grand St., wood block, to W. J. Kernan, & Co., $45,517.

★O., East Liverpool—City let contract paving Bradshaw Ave. to Rinehart Bros., 7th St., $15,763. Noted July 5.

★O., Fremont—City let contract paving 2nd section North Front St., to Modern Constr. Co., Fremont, $19,000. Noted June 28.

★O., Kenton—County let contract building Strahm Pike to H. L. Williams, Shope & Druscnell; Kenton-Lima Pike to J. G. Tressel and W. H. Craft Co., $19,600; Hitslep Pike to W. Sousley, $14,352; Lutz & Davis Pike to Sheppard, Bros., $11,500.

★O., Marysville—Co. Comrs. let contract York Kenton and Marysville Pike to C. S. Grindell, Richmond, Ind., $20,800; Delaware and Bellefontaine Pike, C. Herd, Marysville, $22,412; Bethel and Raymond Pike, Creviston & Johnston, West Mansfield, $5500.

★O., Medina—(Official)—County let contract grading, draining and paving West Salem-Elyria Rd. to Crawford Little Co., Elyria, $12,671.

★O., Napoleon—County let contract building Oklano Rd. to J. A. Westrick, Holgate, $64,600.

★O., Newark—City let contract waterbound macadam road between Croton and Sunbury to A. Gladhill, Galion, $22,150. Noted July 5.

★O., New Lexington—County let contract paving highway between Shawnee and New Straitsville to Houston & Henderson, Logan. About $15,650. Noted May 4.

★O., Portsmouth—City let contract paving 21st St., to S. Monroe & Sons, $13,357. Noted July 5.

O., Sandusky—City received low bids paving 9th St. from Central Constr. Co., Fremont, $36,027. Noted July 19.

★O., Springfield—(Official)—City let contract improving and paving portion Sherman St. to R. J. Kavanaugh, Springfield, $11,628. Noted July 12.

★O., Toledo—City let contract paving Austin and Pontiac Sts. to H. Streicher Co., 317 Terminal Bldg., $20,000 and $8400 respectively; Hawthorne St. to Asphalt Block Paving Co., $17,200. Noted July 12.

★O., Wapakoneta—City let contract building 13,530 sq.yd. asphaltic concrete and vitr. block pavement, including 6120 cu.yd. grading, to H. P. Streicher Co., 317 Terminal Bldg., Toledo, $42,680. Noted Apr. 26.

Ind., Logansport—City received low bids paving Miami St. from Andrews Asphalt Paving Co., Hamilton, O., $2.05 per sq.yd.; Bell & Hall, $1.48 for Bermuda Asphalt.

★Mich., Adrian—(Official)—County let contract improving 4½-mi. road, Dover Twp. to Hayes & Clark, Quincy, $24,455. Noted May 24.

Mich., Detroit—City received low bid asphaltic concrete pavement on concrete foundation, Amherst curbstone on portions of Kercheval and Grey Aves., from Detroit Asphalt Paving Co., McGraw Bldg., $90,870; St. Joseph St., $34,170; Homer Ave., $18,-887.

★Illinois—State Dept., Springfield, let contracts hard roads in northern part of state as follows: Cook Co., Sect. P, concrete, to Chicago Heights Constr. Co., Chicago Heights, $69,996; Sect. Q, concrete, to Connelly & Dunning, 133 West Washington St., Chicago, $50,968; Knox Co., Sects. F and G, combination bids, to Cameron & Joyce Co., Keokuk, Ia., $12,827. Madison Co., concrete, Sect. B, A. Fahrig, $9965, Sect. E, G. R. Hyten, $8869, Sect. F. J. Keel, $9822.

★Ill., Grayville—County let contract constructing 6½ mi. gravel rd. in Hawthorne Twp. to Arkansas Constr. Co., Mt. Vernon, Ind.

★Ill., Grayville—(Official)—City let contract 15,813 sq.yd. brick paving, 25,483 sq.yd. tar macadam paving, 30,107 ft. curb and gutter and 7918 ft. storm sewers to J. R. Crews, Fairfield, $113,124. Noted July 12.

★Wis., Racine—City let contract laying concrete road portion Rapids Dr. to J. Griffiths, Racine, $20,000.

★Ia., Des Moines—City let contract paving portions Carpenter, Meek, Mondamin, College, Enos, Indian, East Court, Olive Ave., 20th, 21st, Crocker, Ascension, and other streets, to Des Moines Asphalt Paving Co., 2nd and New York Aves., $2.09 per yd. About 10,000 yd.

★Minn., Rochester—City let contract grading Kansas, Beaver, 6th, Cherry and Pearl Sts., to Feller Bros.

★Mo., St. Joseph—City let contract resurfacing portion of Felix, Frances and Angelique Sts.; also paving Sycamore St., to Metropolitan Paving Co., 7th and Olive Sts.

★Arkansas—State Highway Comn., Little Rock, let contract 5½-mi. road from Iron Mountain tracks to Little Rock cantonment to M. D. L. Cook, 315 Southern Trust Bldg., $114,000. Noted July 12.

★Arkansas—State Highway Comn., Little Rock, let contract building 10 mi. road from Des Arc to Coloychie Bay, Dist. No. 5, to J. G. Galloway, Cordova, Tenn., $92,000.

★Ark., Wynne—Comrs. Rd. Improv. Dist. No. 1 let contract 18½-mi. gravel road to Shinn & Ammerman, Noodesha, Kan., $75,-812. Noted May 31.

★Colo., Pueblo—City let contract paving streets, South Side Paving Dist., to Axton & Spraten, 35th and Julian Sts., Denver, $350,000. Noted June 14.

★Wash., Camas—City Council let contract paving 3rd St. to United Contr. Co., Northwest Bank Bldg., Portland, $13,001.

★Wash., North Yakima—(Official)—County let contract improving 3.4-mi. highway between Union Gap and Park to Washington Paving Co., L. C. Smith Bldg., Seattle, $35,988. Noted June 28.

★Wash., Seattle—County let contract paving road Auburn to Enumclaw to [illegible] Paving Co., Everett, $91,430. Noted July 12.

★Wash., Seattle—Bd. Pub. Wks. let contract paving 50th Ave., S., to Superior Constr. Co., 1642 Lane St., $10,427. Noted July 12.

★Ore., Coquille—Co. Comrs. let contract building Summer-Coos City Rd. to [illegible] & Gidley, Coquille, $26,204.

★Ore., Hubbard—City let contract [illegible] yd. rockolite paving to Walton Paving Co., Hubbard, $1.05 per yd.

★Cal., Eureka—City let contract grading Buhne St. to Elsmere & Jacobs, Eureka, $15,881.

★Cal., Fresno—City let contract to Thompson Bros., Fresno, grading and oiling Iowa St., $11,658; paving White's Bridge Rd. and B St., $1.55, grading, $11.95 paving, $45 curbing and $17.50 gutter.

★Cal., Martinez—Bd. Supervs. let contract building county highway No. 6 to Tibbitts-Pacific Co., Martinez, $96,966. Noted June 21.

★Cal., Richmond—Co. Bd. Supervs. let contract building concrete highway between Walnut Creek and Bay Point to O'Brien Bros., 240 Montgomery St., and Tibbits Pacific Co., 16 California St., both of San Francisco, $220,000.

★Cal., Richmond—City let contract paving streets, Canal subdivision, to J. E. Staniger, Richmond, $47,904.

★Cal., San Jose—(Official)—County let contract improving Saratoga-Los Gatos Rd. to J. W. McDonald, Jr., $53,598; Mc.Laughlin Ave., San Carlos St., Lewis Rd. to B. Ransome, Inc., Grand Ave. and Harrison St., Oakland, $41,880, $7480 and $8200 respectively. Noted June 21.

★Cal., Ventura—County let contract to H. Hudson, Marsh-Strong Bldg., Los Angeles, for improving Division 9 and 10, including grading, paving and constructing concrete culverts on 14.3 mi. highway from Moorpark to Dillon. About $54,193.

★Cal., Ventura—Bd. Superv. let contract grading and building 4-in. concrete pavement, concrete and corrugated iron culverts on 7.54 mi. Div. Y, Sect. 2, La Crosse to Nordhoff Rd. to C. H. Hudson, Marsh Strong Bldg., Los Angeles, $34,422; 6.01-mi. Div. 4 Piru to county line to Brashear-Burns Co., Wilshire Blvd. and La Brea Ave., Los Angeles, $19,968. Noted July 19.

★Cal., Ventura—County let contract paving 2.2 mi. highway through Oxnard, Warrenite, 16 ft. wide, to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Ageles, $21,587.

★Cal., Visalia—Co. Comrs. let contracts grading, building concrete pavement and corrugated iron pipe culverts, labor and equipment only (county to furnish cement, sand and rock) on 10.48-mi. Richgrove-Ducor Rd. to Highway Constr. Co., San Bernardino, $71,473; 9.99-mi. Porterville-Terra Bella Rd. to Brady & Flynn, San Francisco, $59,000; 7.6-mi. Exeter-Lindsay Rd. to M. T. Shafer, 1614 Temple St., Los Angeles, $46,671; 8.06-mi. Tulare-Goshen Rd. to J. E. Lee, Pasadena, $35,681. Noted June 7.

★Cal., Visalia—Co. Bd. Superv. let contract paving 27-mi. southern division Tulare Co. highway system, warrenite, to A. Teichert & Son, Oschner Bldg., Sacramento, $141,523. Noted July 19.

★Cal., Yuba City—City let contract paving portion 2nd and Bridge Sts. to Federal Constr. Co., Sharon Bldg., San Francisco, $24,651. Noted July 5.

★N. B., Moncton—City let contract building and improving roads to Carritte-Paterson Co., Ltd., 89 Water St., St. John, $16,000.

★Que., Grandmere—Town let contract building macadam road to L. A. Beauchemire, $18,000.

★Ont., Galt—City let contract paving Main St. to Standard Paving Co., Ottawa, $27,000.

★Ont., Ottawa—City let contract paving to O'Leary's Ltd. Banque Natl. Bldg. About $38,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Utah—Salt Lake, Garfield & Western R.R. plans electrification of line. About $50,000. J. Nelson, Salt Lake City, genl. mgr.

Washington—Union Pacific Ry. plans to build 3½-mi. marginal way spur track in Seattle from Spokane St. to city limits. Northern Pacific R.R., Great Northern and Chicago R.R. and Milwaukee & St. Paul Ry. will share cost. R. L. Huntley, Omaha, ch. engr., Union Pacific.

California—Atchison, Topeka & Santa Fe R.R. plans to build 4-mi. spur track in Santa Fe Springs. W. G. Harris, Kerckhoff, Los Angeles, ch. engr.

California—Orange Co. Supervs. granted franchise to Pacific Electric R.R. to extend traction line from Santa Ana to Tustin. G. E. Pillsbury, Los Angeles, ch. engr.

California—San Diego & Southeastern R.R. plans to rebuild line from Santee to Foster. About $75,000. J. D. Spreckles, Union Bldg., pres.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Quebec**—Canadian Pacific Ry. let contract grading work from London to Guelph, involving sidings, bridges, etc., to Sherwood Constr. Co., Mail Bldg., Toronto, $185,000.

EXCAVATION AND DREDGING

Proposed Work

Ia., Council Bluffs—Drainage—J. H. Mayne, co. engr., prepared plans diverting Indian Creek and confining it to concrete channel through city. About $844,093.

Minn., Breckenridge—Ditch—Co. Comrs. voted to build Co. Ditch No. 31. P. E. Traux, aud.

Neb., Lincoln—Drainage—A. Edgren, co. engr., preparing plans to straighten Middle Creek near West O St., D.D. No. 1. A. E. Sutherland, clk.

Neb., Wayne—Drainage—See "Streets Roads."

Tex., Orange—Irrigation—Orange Co. Irrigation Co. plans to build large irrigation pumping plant recently destroyed by fire.

Cal., Madera—Irrigation—Madera Irrigation Dist. had plans prepared by L. C. Hill, engr., 1112 Hollingsworth Bldg., Los Angeles, for diverting water from San Joaquin, Fresno and Chowchilla Rivers and tributaries to irrigate 400,000 acres land in Merced and Madera Cos. About $10,000,000. Noted Apr. 5.

BIDS DESIRED

N. J., Jersey City—Dredging—Until Aug. 7, by City Comrs., dredging and deepening Hudson River, foot of Morgan St. Pier. C. A. Van Keuren, city engr. Noted July 12.

Ill., Cadwell—Drainage—Until Aug. 4, by Comrs. Cadwell D.D. at office of W. M. Davis, for open ditch involving 45,000-cu.yd. exca. J. W. & E. C. Craig, Mattoon, attys.

Ill., Lewiston—Drainage—Until Aug. 10, by Comrs. West Matanzas Drainage and Levee Dist., laying 4200-ft. 16-in. tile. J. H. Wehner, comr. A. Onion, clk.

Ill., Paxton—Drainage—Until Aug. 6, by Cloud & Thompson, attys., redredging main ditch, Wall Twp. D.D., length 41,608-ft. yardage 73,796; lateral No. 2, length 3800-ft., yardage 4000; new work extended into main ditch 7780-ft. long.

Ia., Des Moines—(Official)—Drainage—Until Aug. 20, by J. M. Wells, engr., Nevada, for Joint Dist. No. 1, Polk and Storey Cos., involving 16,629 ft. 18-, 26- and 34-in. tile. About $26,405. Former bids rejected. F. J. Alber, clk. Polk Co. F. E King, clk. Story Co. Noted July 12.

Ia., Ft. Madison—(Officitl)—Drainage—Until Aug. 7, by C. T. Hull, co. aud. building drainage pumphouse; advertised in this issue.

Ia., Rockwell City—Drainage—Until Aug. 3, by R. B. Dixon, co. aud., improving main open ditches and building tile drains, Joint D.D. Nos. 9 and 13, main ditch 82,285-ft. 18- to 5-ft. bottom, 130,550-cu.yd., laterals 17,738-ft. 6-ft. bottom, 19,000-cu.yd., tile branches involve 56,800-ft. 7- 8- 10- 12- 14- 16- 18- 20- 22- 24- and 36 in. tile.

Minn., Marshall—Ditches—Until Aug. 4, by E. S. Shepard, co. aud., building Co. Ditch No. 32, involving 54,550-ft. 5- 6- 7- 8- 9- 10½- 14- 16- 20- 22- 24- and 26-in. tile, cost, $22,754; Ditch No. 37, 29,756-ft. 5- 6- 7- 8- 9- 10- 12- 14- 16- 18- 20- 22- and 24-in. tile, $12,667; 54, 299-cu.yd. open ditch, $7601; Ditch No. 38, 28,858-ft. 5- 6- 7- 8- 9- 10- 12- 15- 18- and 24-in. tile, $11,655.

Minn., New Ulm—Drainage—Until Aug. 5, by L. F. Vogel, co. aud., building D.D. No. 33. Work involves main open ditch, 3-mi. long, 8-ft. wide at bottom, average depth 8-ft. involving 131,200-cu.yd. excav. and 171,851-ft. 6- to 32-in. tile. F. D. Minium, co. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Fla., Arcadia**—Drainage—E. B. Wilcoken, pres. bd. supervs., let contract 33-mi. open drainage ditches to W. B. Williams, Oviedo, $51,581. Noted June 14.

★**O., Cleveland**—Excavation—Bd. Control let contract excavating for public hall to F. R. Jones Co., Citizens Bldg., $44,890.

★**Ia., Estherville**—Drainage—County let contract Ditch No. 87 to Cement Products Co., $14,444.

★**Ia., Glenwood**—(Official)—Ditch—County let contract Silver Creek Ditch No. 1 to Phelan & Shirley, Glenwood, 7c. per cu.yd. Noted June 21.

Ia., Nevada—(Official)—F. E. King, co. aud. received low bids building ditches and drains, Richland Twp. D.D. No. 81, from J. McKillip, Faribault, Minn., 19½c. per cu. yd., open work; Fry & Hankins, Cole, $11,533 labor; Macomb Sewer Pipe Co., $23,982 tile. Noted July 12.

★**Minn., Cambridge**—(Official)—Ditch—G. C. Smith, co. aud., let contract Co. Ditch No. 16 to Petersen & Olson, Stauchfield, $16,145. Noted July 5.

★**Minn., Chaska**—(Official)—Ditch—J. B. Connelly, co. aud., let contract dredging Co. Ditch No. 6 to Central Contr. Co., Minneapolis, $14,567. Noted May 31.

★**Minn., Redwood Falls**—Ditch—County let contract Ditch No. 121 to J Gerding, Redwood Falls, $14,000. Noted July 5.

★**N. D., Fargo**—(Official)—Dredging—County let contract 800,000-yd. floating dredge work, Drain No. 21 to W. J. Hoy & Co., Metropolitan Bldg., St. Paul, 12c. per yd.

INDUSTRIAL WORKS

Proposed Work

Mass., Boston—Armour & Co., 43 Commercial St., plans 6-story, 74 x 213-ft., brick refrigerator warehouse. About $200,000.

Mass., Cambridge—Swift & Co., 60 North Market St., Boston, plans 5-story, 60 x 80-ft. addition to plant. A. E. Bump, 60 North Market St., Boston, archt.

N. Y., S. I., Milliken—(Port Richmond P. O.)—Downey Shipbuilding Corp., 120 Bway., New York City, plans 6 machine shops. Milliken Bros. Inc., 111 Bway., New York City, engrs.

N. J., Bayonne—Hudson Mill Supply Co., 373 Bway, plans to build factory. About $100,000.

N. J., Jersey City—American Can Co., 120 Bway, New York City, negotiating with City Comrs., for permission to build new plant at Grand St. and Cornelison Ave. About $500,000.

N. J., New Brunswick—T. A. Gillespie Co., purchased 640 acres in Sayreville Twp. and will build plant. About $3,000,000.

Pa., Phila.—See "Reinforced Concrete."

Md., Baltimore—H. E. Crook, 28 Light St., recently incorporated, has increased capital stock from $120,000 to $250,000. Company plans to build shipbuilding plant. H. E. Crook, pres.

Md., Sparrows Point—(Baltimore P. O.)—Bethlehem Steel Co., c/o Tobias, South Bethlehem, receives bids about Aug. 1, for 1-story, 65 x 200-ft. plant. About $200,000.

Ga., Moultrie—Moultrie Packing Co. plans 4-story, 80 x 80 ft. addition to storage plant here. E. L. Brooks, mgr.

Ga., Savannah—Cambria Steel Co., 165 Bway., New York City, plans large shipbuilding plant near here.

Fla., Pensacola—Georgia, Florida & Alabama Ry. plans to build shops here. About $50,000. R. B. Coleman, Bainbridge, ch. engr.

La., New Orleans—Dixie Steel Corp., Metropolitan Bank Bldg., plans 60 x 200-ft. iron and steel plant. About $250,000

O., Akron—Kendall Tire & Rubber Co., Ohio Bldg., plans steel and brick plant. About $100,000 W. C. Owen & Co., 1900 Euclid Ave., Cleveland, archt.

O., Cleveland—Parish & Bingham Co., Madison Ave. and West 106th St., receives bids about Aug. 1 for brick and steel garage and shipbuilding plant. About $225,000. E. McGeorge Leader-News Bldg., archt.

O., Orrville—Ohio Blower Co., 5125 Perkins Ave., N. E., Cleveland, is having plans prepared for new factory by E. McGeorge, archt., Leader-News Bldg., Cleveland. About $150,000.

O., Toledo—Maumee Ice & Storage Corp., c/o Central Products Co., 237 Ottawa St., plans 6-story, 100 x 127-ft cold storage plant. L. M. Levine, Room 1855, 120 Bway., New York City, ch. engr. A. McLean, Hotel Michigan, supt. of constr.

O., Youngstown—Barrett Co., 12 Poland Ave., plans new addition to plant. About $50,000.

Mich., Detroit—City will build 1- and 2-story, rein.-con. and steel repair shop for fire dept. on Russel St. About $90,000.

Ill., Chicago—W. F. Hall Printing Co., 466 West Superior St., plans 7-story, brick and stone plant at Chicago, Townsend, Kinsburg and Superior Sts. About $900,000. Giaver & Dinkelberg, archts.

Ill., Peoria—Holt Mfg. Co., West Washington St., East Peoria, plans 1-story, 140 x 300-ft. foundry. About $100,000. Postle & Fisher, 140 South Dearborn St., Chicago, archts.

Wis., Milwaukee—See "Reinforced Concrete."

Wis., Milwaukee—L. Teweles Seed Co., 113 Clybourn St., receives bids about Sept. 1, for 7-story, 150 x 180-ft. rein.-con. and brick, seed elevator and warehouse. About $200,000. Fraser Co., 667 East Water St., mill engr.

Wis., Milwaukee—J. Wilde Evaporated Milk Co., 67 East Long St., Columbus, plans 2-story, 100 x 220-ft., brick and steel plant and boiler house here. About $200,000.

Ia., Sac City—City plans election, August 3, to vote on $60,000 bonds issue for light plant. T. H. Stalford, mayor.

Minn., Minneapolis—Green Mountain Investment Co. plans 6-story warehouse at 714 Washington Ave. About $100,000.

Tex., Waco—Exporters & Traders' Compress & Warehouse Co., 10½ South 6th St., plans warehouse in East Waco. About $50,000.

Cal., Berkeley—Philadelphia Quartz Co. plans to build plant here. About $100,000. A. C. Elkington, pres.

Cal., San Diego—A. J. Savage Munitions Co., San Diego, plans factory here. First unit to cost about, $175,000.

Cal., San Francisco—Union Iron Works plans addition to plant here. About $2,000,000. J. A. McGregor, 224 Spear St., pres.

BIDS DESIRED

Vt., Bennington—Until Aug. 1, by Bennington Garage Co., 3-story, 97 x 209-ft. garage and office building. About $80,000. E. W. Williams, prop. P. W. Thayer, Bennington, archt.

Mich., Mottville—(Official)—Until Aug. 6, by G. S. Williams, engr., Cornwell Bldg., Ann Arbor, for rein.-con. and brick power house, etc.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston**—Quincy Market Cold Storage & Warehouse Co., 153 Commercial St., let contract 11-story, 140 x 152-ft. storage plant to Turner Constr. Co., 45 Milk St.

★**Mass., Boston**—See "Reinforced Concrete."

★**Mass., Quincy**—Fore River Shipbuilding Co. let contract 1-story, 135 x 150-ft., steel and galvanized iron machine shop and 72 x 150-ft. boiler shop, to Aberthaw Constr. Co., 27 School St., Boston.

★**N. Y., Long Island City**—See "Reinforced Concrete."

★**N. Y., Utica**—Savage Arms Corp. let contract 50 x 220-ft. and 1-story, 34 x 270-ft. machine shop and 1-story, 40 x 80-ft. dry kiln, to J. G. Brown, Witherspoon Bldg., Phila.

★**Pa., Hazelton**—Jeansville Iron Works, c/o Worthington Pump & Machine Co., let contract 1-story, 51 x 336-ft. machine shop to J. G. Brown, Juniper and Walnut Sts., Phila. About $50,000.

Industrial Work (Continued)

★Pa., Phila.—See "Reinforced Concrete."

★Md., Baltimore—Baltimore Dry Docks & Shipbuilding Co., 1720 Thames St., let contract warehouse and office, rein.-con. and brick, to West Constr. Co., Amer. Bldg. About $50,000.

★O., Cleveland—Bloomquist Eck Machinery & Mfg. Co., 205 St. Clair St., let contract 1- and 3-story, 60 x 200-ft. machine shop to A. G. McKee & Co., 1301 Rockefeller Bldg. About $60,000.

★O., Cleveland—Federal Improv. Co., 6211-15 Carnegie Ave., let contract 40 x 230-ft. brick addition to warehouse to Hunkin-Conkey Constr. Co. 321 Cuyahoga Bldg. About $88,000.

★O., Cleveland—Ideal Tire & Rubber Co., 503 Union Bldg., let contract brick and steel plant to Hunkin-Conkey Constr. Co., 321 Cuyahoga Bldg. About $100,000. Noted June 7.

O., Cleveland—White Co., East 79th and St. Clair Sts., let contract 120 x 500-ft. factory to Walsh Constr. Co., Citizens Bldg. About $350,000.

★Ind., South Bend—Studebaker Corp., Administration Bldg., let contract factory, Kendall and Garst Sts., to J. Stewart Co., 30 Church St., New York City. About $150,000.

Ill., Chicago—Staver Motor Car Co., 3021 South Michigan Ave., let contract 3-story, 110 x 175-ft. service building to Pleas Constr. Co., 30 North LaSalle St. About $125,000. Noted May 24.

★Wis., Kenosha—Cooper Underwear Co. let contract 4-story, 50 x 118-ft. addition to A. Lund Constr. Co., 19 South LaSalle St., Chicago. About $50,000. Noted June 28.

★Wis., La Crosse—J. A. Salzar Seed Co. let contract 4-story, 64 x 160-ft. seed elevator to Peter Nelson & Sons, La Crosse. About $75,000.

★Wis., Racine—Racine Auto Tire Co., Racine, let contract 5-story, 265 x 320-ft. factory to R. H. Folwell Constr. Co., McCormick Bldg., Chicago. About $1,000,000.

★Mo., Kansas City—Montgomery & Ward Co., St. John and Belmont Sts., let contract 10-story, 108 x 182-ft. concrete warehouse to Wells Bros., 23 West Jackson St., Chicago.

★Cal., Los Angeles—Pacific Coast Beef & Provision Co. let contract 5-story, 65 x 85-ft., brick and rein.-con. addition to cooler building at 1000 Lyon St. to Leonard & Peck, H. W. Hellman Bldg. About $50,000.

BUILDINGS

Proposed Work

Mass., Boston—Office—C. J. Huntley, 17 Yarmouth St., plans 4-story, 55 x 65-ft., at 239 Dudley St. About $60,000. J. Parks, 46 Prichard St., Somerville, archt.

Mass., Boston—Theater—Atlas Realty Co., 7 Water St., plans, 2-story, 75 x 250 ft., Huntington Ave. and Calumet St. About $250,000. J. M. Parks, 46 Pritchard Ave., Somerville, archt.

Mass., Northampton—Dormitory—Smith College plans, 3-story. About $125,000. Cram & Ferguson, 15 Beacon St., Boston, archts.

Mass., Wakefield — School — Bd. Educ. plans to build. About $280,000. J. J. Round, chn. bldg. com. Hartwell, Richardson & Driver, archts.

Mass., Worcester — Home — Worcester Home for Aged Men, Main St., plans, 2-story brick. About $75,000. C. W. Fisher, 82 Foster St., archt.

Conn., Ansonia—Bank—Ansonia Natl. Bank, 165 Main St., rejected bids, for 1-story, 45 x 60-ft. About $50,000. C. E. Brooker, pres. New bids soon. Noted June 14.

Conn., Bridgeport—D. S. Rivkin, 1st Natl. Bank Bldg., plans 5-story, 80 x 125-ft. professional building. E. B. Caldwell, Jr., 1st Natl. Bank Bldg., archt.

Conn., Bridgeport—Industrial Home—Bridgeport Christian Union, c/o J. Edwards, plans, 4-story, 87 x 100-ft. About $60,000. E. B. Caldwell, Jr., 509 1st Natl. Bank Bldg., archt.

N. Y., Albany—City Hall—Bd. Estimate plans, J. W. Stevens, mayor. About $115,000. W. G. Van Guysling, 1 Clinton Sq., archt.

N. Y., New York—Theater—B. F. Keith New York Theatres Co., 1564 Bway., plans Fordham Rd. and Valentine Ave. (Bronx Boro.). About $500,000.

N. Y., Rochester—School—Bd. Educ. plans, 3-story, 240 x 240 ft. About $500,000. J. S. Mullen, Municipal Bldg., secy. Gordan & Madden and W. G. Kaelber, 300 Sibley Blk., archts.

N. J., Bayonne—Hospital—Bd. Dir. of Bayonne Hospital soon receive bids for new addition. About $100,000.

N. J., Newark—Fire House—City having plans prepared by F. Grad, archt., American Natl. Bank Bldg., at Palm St. and Sanford Ave. About $100,000.

O., Lakewood—School—Bd. Educ. receives bids about Aug. 1, for 3 schools. About $500,000. C. W. Hopkins, 900 Rose Bldg., Cleveland, archt. Noted June 28.

Ind., Gary—Hospital—Bd. of Governors of Gary General Hospital having plans prepared, 5th Ave. and Grant St. About $200,000. R. E. Smith, 111 West Monroe St., archt.

Ind., New Castle—Asylum—Indiana Epileptic Village plans 1-story addition to boys cottage. About $63,000. W. C. Van Nuys, supt. H. Foltz, 1456 Lemcke Annex., Indianapolis, archt.

Mich., Bessemer — School — Bd. Educ. plans to build 2-story building to replace Ashland School recently destroyed by fire. About. $175,000.

Mich., Detroit—Mercantile—See "Reinforced Concrete."

Mich., Detroit—Opera House—R. E. Olds, Lansing, having plans prepared, 11-story, steel, granite and tile. About $750,000. Baxter, O'Dell & Halpin, 1024 Hammond Bldg., archts.

Mich., Lansing—Armory—State soon receives bids, 1- and 2-story, 125 x 240-ft. About $120,000. S. D. Butterworth, Tussing Bldg., archt. Noted July 5.

Mich., Port Huron—School—Bd. Educ. plans new building on 10th St. About $175,000. G. L. Harvey, 201 Huron Bldg., archt.

Ill., Chicago—School—Bd. Educ. plans, 3-story, on Keeler Ave. About $320,000. J. A. Guilford, mgr. A. F. Hussander, 7 South Dearborn St., archt.

Ill., Decatur—High School—Bd. Educ. receives bids about Aug. 10, 2-story, 153 x 236-ft. About $165,000. Brooks & Bremhall, Natl. Bank of Decatur Bldg.,, archts.

Wis., Milwaukee—School Bd. Educ. having plans prepared, 4-story, 264 x 300-ft., new Bay View High School, Montana and Lenox Sts., about $450,000. Van Ryn & DeGelleke, Caswell Blk., archts.

Wis., Milwaukee—School—Bd. Educ. receives bids about Sept. 1, 3-story, 110 x 150-ft., rein.-con. and brick addition. F. M. Harbach, secy. Van Ryn & DeGelleke, Caswell Blk., archts.

Wis., Milwaukee—School—Bd. Educ. plans 3-story, 110 x 115-ft. addition on 9th St. About $115,000. E. M. Harbach, 10th and Prairie Sts., secy. Van Ryn & DeGelleke, Caswell Bldg., archts.

Wis., West Salem—High School—Bd. Educ. had plans prepared for 16-room addition to high school. About $75,000. E. J. Hancock, Eau Claire, archt.

Ia., Ames—Armory—State Bd. Educ. plans, 1-story, 200 x 400-ft. About $125,000. W. G. Gemmill, secy. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., Des Moines, archts.

Ia., Hampton—Hotel—North American Hotel Co. having plans prepared by Bankers Realty Investment Co., archts., Bee Bldg., Omaha, 3-story, 122 x 132-ft. About $60,000.

Ia., Letts—School—Bd. Educ. plans, 2-story. About $50,000. Eckland, Fugard & Knapp, McKinnie Blk., Moline, Ill., archts.

Ia., Spirit Lake—Home—Knight Templars of Iowa, plans, rebuilding home recently destroyed by fire. About $100,000.

Kan., Lawrence—Art—State plans 4-story, terra cotta and rein.-con. liberal arts building. About $225,000. T. A. Kimball, Topeka, mgr. bd. administration. C. H. Chandler, State Capital Bldg., Topeka, archt.

Pa., Phila.—Theater and Office—See "Reinforced Concrete."

Md., Baltimore—Laboratory—J. Hopkins Hospital plans, 3-story, stone and brick. About $200,000. F. Goodnow, pres. Archer & Allen, 1 East Lexington St., archts.

Okla., Red Fork—School—City voted $50,000 bond issue for building school. Address the Mayor.

Cal., Coalinga—(Official)—High hool —Bd. Educ. receives bids about A 15. About $100,000. E. J. Kump, Fresno rcht. Noted June 28.

BIDS DESIRED

N. H., Durham—(Official)—Until g 4, by Governors Council, Concord, for om-mons building and brick dormitory 100,000. E. T. Huddleston, Dept. Drawi c o College, archt. Noted June 21.

Mass., Fall River—Hospital—Unt Aug 10, by D. H. Fuller, supt. of hospita City Hall, on Bay St. About $150,000.

N. Y., Cohoes—High School—(Off l)— Until Aug. 17, by Bd. Educ., 2-story, um-bia and Bevan Sts. About $150,000. oker & Marsh, 101 Park Ave., New York City, archts.

N. Y., New York—(Official)—Until Aug /, by Bd. Water Supply, for removing teel-frame superstructure and furnishing and building portable steel building at Shaft 11; advertised in this issue.

N. J., Brunswick—Junior High School—Until Aug. 24, by Bd. Educ. About $275,000. A Merchant, 363 George St., archt.

N. C., Greensboro—Court House and Jail—Until Aug. 22, by Co. Comn. About $250,000. H. Barton, archt.

O., Bedford—High School—(Official)—Until Aug. 10, by Bd. Educ. About $50,000. E. Sentner, clk. E. E. Beat. Elyria, archt. Noted May 24.

O., Lebanon—High School—(Official)—Until Aug. 3, by Bd. Educ. W. Chester, clk. Bausmith & Drainie, 901 Gerke Bldg., Cincinnati, archts.

O., St., Paris—Grade and High School—Until Aug. 4, by Bd. Educ., Jackson Twp., 2-story. About $75,000. G. Shelfs, 319 New 1st Natl. Bank Bldg., Columbus, archt. Noted June 7.

O., Springfield—Hospital—Until Aug. 2, by Pythian Hospital, c/o R. C. Gotwald, archt., Gotwald Bldg., 62 x 105-ft., brick and stone. About $50,000. Noted May 22.

O., Washington—C. H. — School — Until July 30, by Bd. Educ., 2-story, 74 x 36-ft. About $50,000. A. W. Glowser, pres. J. H. Hicks, Dennis Blk., archt.

O., Youngstown—Schools—Until Aug. 7, by Bd. Educ., for 5 grade schools. About $360,000. C. H. Baird, 123 McKinley Ave., pres. P. Boucherle, Stambaugh Bldg., archt.

★Mich., Detroit—See "Reinforced Concrete."

Ia., Mason City—School—Until Aug. 13, by R. L. James, secy. bd. educ., 2-story, brick, stone and rein.-con. About $100,000. J. H. Felt & Co., 800 Grand Ave. Temple, Kansas City, Mo., archts. Noted June 21.

Neb., Springfield — High and Grade School—(Official)—Until Aug. 17, by Bd. Educ. F. Davidson, secy. Bankers Realty Investment Co., Bee Bldg., Omaha, archts.

Mo., Trenton—School—Until Aug. 1, by Bd. Educ., 3-story, brick and rein.-con. About $75,000. H. E. Morris, clk.

Cal., Glendora—School—Until Aug. 4, by Trustees Glendora School Dist., brick and hollow tile. About $50,000. Allison & Allison, 1406 Hibernian Bldg., Los Angeles, archts.

Cal., Santa Barbara — Hospital — See "Reinforced Concrete."

PRICES AND CONTRACTS ADARDED

(★Indicates award of contract)

★Mass., Boston—Y. M. C. A. let contract 4-story, 70 x 72-ft., brick and rein.-con. building at City Sq., Charleston Dist. to C. Logan Bldg. Co., 18 Tremont St. About $350,000.

★Conn., Bridgeport—Industrial Home—Bridgeport Christian Union let contract, to Dowling & Bottomley Co., 1119 Broad St. About $100,000.

★Conn., New Haven—Dormitories—Trustees of Yale College let contract to M. Eidlitz & Son, 30 East 42nd St., New York City. About $3,000,000.

★N. Y., Niagara Falls—Police Station and Jail—City let contract 3-story, brick to Brown Pollard Constr. Co., Gluck Bldg. About $60,000.

★N. Y., Syracuse—School—Bd. Educ. let contract, to Central City Constr. Co., 747 Mill St., Watertown.

★N. J., Trenton—Bank—Trenton Banking Co. let contract for new building, State and Warren Sts., to S. W. Mather & Son, Greenwood and Canal Sts. About $166,789.

Buildings (Continued)

★Pa., Phila.—Library—City let contract, Vine, 19th, Wood and 20th Sts., to J. Gill & Sons, Citizens Bldg., Cleveland. About $2,270,000. Noted June 28.

★Md., Baltimore—School, Assembly Hall and Gymnasium—Park School let contract, 2½-story, 35 x 350-ft., to W. E. Burnham, Law Bldg. About $75,000. Noted May 17.

★Va., Portsmouth—Office—Texas Co. let contract 10- or 12-story, brick and terra cotta, to Baker & Brinkley, Dickson Bldg., Norfolk. About $50,000.

★Ga., Atlanta—Dormitory—City let contract 48 x 150-ft. rein.-con., brick and terra cotta, to Griffin Constr. Co., Candler Bldg. About $60,000.

★O., Cleveland—Office—Glengariff Realty Co., Erie Bldg., let contract, 2-story, concrete and steel at 4812 Windsor Ave. to Masters & Mullen Constr. Co., Electric Bldg. About $75,000.

O., Cleveland—School—Bd. Educ. received low bids for Gladstone School from H. F. Juergens Co., 3315 West 25th St. About $165,225. Noted June 14.

★Mich., Detroit—Bank—Dime Savings Bank let contract, 1-story, 43 x 63-ft., to E. D. Jackson Contr. Co., 1921 Ford Bldg. About $70,000.

★Ill., Carthage — Dormitory — Carthage College let contract, 4-story, brick and stone, to E. S. Moore Danville. About $80,000.

★Ill., Chicago—School—Bd. Educ. let contract 3-story, brick addition, at 1235-57 North Claremont Ave., to A. & E. Anderson Co., 5954 Magnolia St. About $650,000.

★Wis., Ashland—School—Bd. Educ. let contract, rebuilding school recently destroyed by fire, to Tomlinson, Egan, Ashland. About $90,000. Noted July 5.

★Wis., Kenosha—High School—Bd. Educ. let contract, 2-story, 93 x 168 ft., new Washington High School, to Riesen Bros. Co., 1003 1st Natl. Bank Bldg., Milwaukee. About $120,000.

★Wis., Manitowoc — Club — Manitowoc Lodge of Elks let contract, 2-story, 60 x 90 ft., to Michie Constr. Co., Camp Bldg., Milwaukee. About $75,000. Noted July 5.

★Wis., Mt. Horeb—(Dane, O. P. O.)—High School—Bd. Educ. let contract to Wagner & Bauman, Monroe. About $93,000.

★Wis., Racine—Bank and Office—Manufacturers Natl. Bank let contract to Anderson-Stranberg Co., 19 South La Salle St., Chicago. About $150,000.

★Wis., Stevens Point—Depot—Minneapolis, St. Paul & Sault Ste. Marie R.R. let contract 2-story, 80 x 144-ft., brick and concrete depot, division offices, club house, etc., to Withee Constr. Co., Withee. About $75,000.

★Wis., Wilwaukee — Restaurant — Globe Investment Co., c/o Schroder, 86 Michigan St., let contract, 7-story, 114 x 124-ft., to Olson Carson Co., Tacoma Bldg. About $500,000. Noted July 12.

★Ia., Woodward — Dining Hall, etc.—State Hospital Colony let contract, to J. E. Tusant & Son, 583 7th St., Des Moines. About $75,000.

★Kan., Ft. Scott—High School—Bd. Educ. let contract, 3-story, 70 x 200-ft., brick and stone, to Eberhardt Constr. Co., Salina. About $85,000. Noted June 21.

S. D., Sioux Falls—City Hall—City received low bids from Sioux Falls Constr. Co., Sioux Falls, $92,900; Collins Bros., Sioux Falls, $96,500; O. H. Olsen, Stillwater, Minn., $99,175.

S. D., Wessington Springs—High School—(Official)—Bd. Educ. let contract, to F. R. Comb, 201 Lumber Ex. Bldg., Minneapolis, $57,600. Noted June 7.

★N. D., Blue Hill—School—(Official)—Bd. Educ. let contract to G. W. Tenning, Bismarck. About $77,000. Noted July 12.

★Mo., St. Louis—Hotel—Mortgage Trust Co., 204 North 4th St., let contract, 15- to 25-story, 130 x 150-ft., to Westlake Constr. Co., 717 Locust St. About $2,000,000.

★Mo., St. Louis—School—Bd. Educ. let contract, 2-story, 80 x 110-ft., to Murch Bros. Constr. Co., Ry. Ex. Bldg. About $134,840. Noted July 12.

★Okla., Tulsa—School—Bd. Educ. let contract, 1- and 2-story, brick and rein.-con. to Latimer & Rouch, 1301 South Carson St. About $70,000.

★Okla., Tulsa—Office—J. A. Waldrep, 215 East 1st St., let contract, 3-story, 50 x 120-ft., brick, steel and rein.-con. to J. Simpson Constr. Co., 219 East 1st St. About $50,000.

★Colo., Rocky Ford—School—Bd. Educ. let contract, 3-story, 115 x 160-ft., to G. O. Teats, Rocky Ford, about $73,963. Noted May 17.

★Cal., Los Banos—School—School Trustees let contract, brick and concrete, to L. G. Bergen, Call Bldg., San Francisco $61,472.

FEDERAL GOVERNMENT WORK

Proposed Work

N. J., Vineland—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened June 27 as too high. Work will be readvertised. Noted July 5.

S. C., Port Royal—Buildings—Bureau Yards and Docks, Navy Dept., Wash., rejected bids opened June 25, for 8 buildings for officers' quarters. Noted July 5.

R. I., Melville—Extending Fuel-Oil Storage Plant—Until July 30, by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., for underground concrete oil reservoir, pumps, piping, heaters and buildings at Naval Coal Depot

BIDS DESIRED

N. Y., Buffalo—Cement—Until Aug. 2, by Lighthouse Inspector, furnishing 1500 bbl. Amer. Portland cement; advertised in this issue.

Pa., Franklin—Post Office—Until Aug. 30, by J. A. Wetmore, superv. archt., treas. dept., Wash.; advertised in this issue.

S. C., Charleston—Storehouse—Until Aug. 6, by Bureau Yards and Docks (F. R. Harris, ch), Navy Dept., Wash., rein.-con., at Navy Yard.

Mich., Grand Haven—Building—Until Aug. 21, by Navy Dept., U. S. Coast Guard, Wash., for additions and repairs to station building and launchway at Coast Guard Station No. 268; advertised in this issue.

Wyo., Torrington—Until Sept. 5, by U. S. Rec. Ser., for earthwork and structures on Ft. Laramie Canal, North Platte Project, Nebraska, Wyoming, involving 1,274,000 cu.yd. excav. placing 2925 cu.yd. concrete, 336,000 lb. steel and 5 gates. A. P. Davis, ch. engr.

Mo., St. Louis—Levee Work—Until Aug. 11, by Secy. Mississippi River Comn., 1311 International Life Bldg., 90,000 cu.yd. earthwork, Hunt D.D.

Cal., San Francisco—Dredging Plant—Until Aug. 2, by U. S. Engr. Office, U. S. Army, 405 Custom House, for hire and operation of 1 clam shell dredging plant for work in Sacramento, San Joaquin, Feather and Mokelumne Rivers.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., Lake Denmark—Buildings—Bureau Yards and Docks, Navy Dept., Wash., received low bids, July 16, building additions to 8 magazine buildings at naval ammunition depot (a) work complete (b) making all foundation walls of concrete instead of stone, from J. C. Lyons Sons Co., 30 East 42nd St., New York City, (a) $127,305, (b) $129,480; Columbus Circle Constr. Co., 51 East 42nd St., New York City, (a) $128,000, (b) $130,000; Frymier & Hanna, 25 West 45th St., New York City, (a) $129,900, (b) $129,480.

★Md., Annapolis — Buildings — Bureau Yards and Docks, Navy Dept., Wash., let contract addition to Isherwood Hall to J. H. Miller, Eutaw and Franklin Sts., Baltimore, $203,000. Noted July 19.

★Md., Annapolis — Buildings — Bureau Yards and Docks, Navy Dept., Wash., let contract addition to Bancroft Hall, U. S. Naval Academy, to J. H. Miller, Inc., Eutaw and Franklin Sts., Baltimore, cost plus 10%. Noted July 19.

Wash., D. C.—Repair Shop—Bureau Yards and Docks, Navy Dept., received low bids addition to Nautical Instrument Repair at Naval Observatory, (work complete), from W. E. Mooney, Evans Bldg., $33,500, 95 days; Melton Constr. Co., Real Estate Trust Bldg., $37,527, 130 days; W. P. Lipscomb & Co., 1405 F St., $39,800, 120 days. Noted July 5.

W. Va., Charleston—Projectile Plant—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., received low bids 4 buildings for machine shop, foundry, forge shop, heat-treating shop, lavatory and locker rooms at U. S. naval projectile plant, from C. W. McNulty Co., 814½ Quarrier St.; Boyle-Robertson Constr. Co., Inc., Evans Bldg., Wash., D. C.; F. W. Mark Constr. Co., 701 Finance Bldg., Phila.; J. Stewart & Co., Inc., 30 Church St., New York City; R. H. Arnold Co., 830 McGarry St., Los Angeles; Kettler-Elliott Erection Co., 1407 Ashland Blk., Chicago; Warren Moore & Co., Colonial Trust Bldg., Phila.; J. W. Cooper, 721 Fidelity Bldg., Buffalo, cost plus percentage.

Fla., Key West—Officers' Quarters—Bureau Yards and Docks, Navy Dept., Wash., received only bid from W. L. Hadlow, 4 Borland Bldg., Jacksonville, (work complete) $11,654.

★Ala., Jasper—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to A. Blair, Hill Bldg., Montgomery. Noted July 12.

Ill., Hoopeston—Post Office—J. A. Wetmore, superv. archt., treas dept., Wash., received low bids, July 12, (a) limestone, (b) sandstone, from Clarke Constr. Co., Danville, (a) $53,699 (b) $55,400; E. A. Steinenger, St. Louis, (a) $56,000; Yeager & Sons, Danville, (a) $58,497 (b) $58,997. Noted June 7.

★Ia., Glenwood—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to C. Weitz Sons, 712 Mulberry St., Des Moines, $38,820, time 12 mos. Noted July 19.

★Wash., American Lake—Roads—N. D. Baker, secy. war, let contract paving all roads within army cantonment to Independent Asphalt Paving Co., Northern Bank Bldg., Seattle, $15,000 per mi. Cost plus percentage of profit.

Mass., Newburyport—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, July 16, from J. M. Monroe, North Attleboro, $69,712; C. S. Cunningham & Sons Co., 23 Central Ave., Lynn, $79,800; W. H. Fissell & Co., 1328 Bway., New York City, $84,797. Noted June 14.

MISCELLANEOUS

Proposed Work

Tide Gate, etc.—New Haven, Conn.—(Official)—City rejected bids opened July 18, for tide gate with spillways and river walls on Mill River, North State St. Noted July 12.

Parks—Syracuse, N. Y.—Park Comn. approved $160,000 bond issue to build and improve parks, including Burnet and Onondaga Parks.

Elimination of Grade Crossings—Bristol, Pa.—Pennsylvania R.R. made application to Pub. Ser. Commission to abolish grade crossings at Central Ave. by constructing new road parallel to tracks, connecting with White Hall Rd., also abolishment of grade crossings at Edgely Rd., Clark Ave. and Hellings's Rd. by building overhead bridges. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Incinerating Plant—Paducah, Ky.—City Comrs. plan. Proposition has been made by International Sanitation & Development Co. of Springfield to build double unit plant here at once. About $12,000.

Dock—Minneapolis, Minn—City prepared plans dock for loading ore from Minnesota iron ranges for shipment down Mississippi to St. Louis. O. Claussen, city engr.

Levee Improvements—Clarksville, Tex.—Attorney General's Dept., Austin, approved $27,500 bonds for work in Red River Co. Levee Improv. Dist. No. 2.

Incinerator—Okmulgee, Okla.—City election Aug. 7 to vote on $30,000 bonds to build incinerator. M. N. Coles, city engr.

BIDS DESIRED

Piers, etc.—Albany, N. Y.—(Official)—Until Aug. 21 by W. W. Wotherspoon, supt. pub. wks., for piers, dolphins, etc., Gowanus Bay, Brooklyn, N. Y.; advertised in this issue.

River Improvements—White Plains, N. Y.—See "Sewers."

Embankment—Greenville, Miss.—(Official—Until Aug. 3, by Highway Comrs., 50,000 cu.yd. embankment. O. C. Kulicka, asst. engr.

Air Compressors—Galesburg, Ill.—(Official)—Until Aug. 6, by W. L. Boutelle, city clk.; advertised in this issue.

Incinerating Plant—Kansas City, Mo.—Until Aug. 3, by City, involving 2 unit plant, 100-ton capacity, brick building, 150-ft. stack. W. H. Bennaham, secy. bd. pub. wks. Noted June 14.

Wharf—Houston, Tex.—See "Reinforced Concrete."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Tunnel Improvements—Boston, Mass.—B. L. Beal, secy. Boston Transit Comn., received low bids setting 3800 sq.yd. ribbed tile on walls, etc., on (a) Bway. (b) Andrews Sq. Sta., from Galassi Mosaic & Tile Co., South Ash St., (a) $13,322 (b) $11,927; J. Vincenzi Co., (a) $15,280, (b) $11,776; Rinaldi Tile Co., 263 Atlantic Ave., (a) $15,516, (b) $11,922.

Stations—New York, N. Y.—Pub. Ser. Comn., 120 Bway., received low bid station finish for 2 stations on Bway. 4th Ave. Rapid Transit R.R. from D. E. Conners, 64 West 88th St., $155,000. (Unofficial totals.) Noted July 12.

SEARCHLIGHT SECTION

Contracts To Be Let

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesdav, 10 a. m. for issue mailed the next day

PROPOSALS

Bids received until Aug. 3, 1917.

Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, July 6th, 1917.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Friday, August 3rd, 1917, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 156.
Erie Canal—Section 5.

For constructing a highway bridge across Wood Creek about one mile east of Sylvan Beach.

Sheets 1 to 3, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans of drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the City of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works, for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the same shal have been presented for collection according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

Bids received until July 30, 1917.

Sanitary Sewers

Commerce, Okla.

Town of Commerce, Okla., will receive bids for system of sanitary sewers on July 30. Plans and specifications on file in clerk's office at Commerce City. Council reserves usual rights concerning bids.

CITY CLERK.

Bids received until Aug. 22, 1917.

Tunnel Aqueduct

San Francisco, Cal.

Sealed proposals will be received at the office of the Board of Public Works, City Hall, San Francisco, up to 3:00 o'clock P.M., Wednesday, August 22, 1917, for constructing 18 miles of tunnel aqueduct in the Mountain Division of the Hetch Hetchy Water Supply Project, California.

Tunnel is to be of horseshoe section, lined with concrete and to be 10 ft. 3 in. in height and width inside of lining.

Specifications and proposal blank may be obtained from the City Engineer, City Hall, San Francisco, on deposit of $20.

The estimated cost of the work is approximately $6,000,000 and it is divided into three sections—contractors may bid on one or all sections.

M. M. O'SHAUGHNESSY,
City Engineer.

PROPOSALS

Bids received until July 30, 1917.

Highway Work

Albany, N. Y.

Office of the State Commission of Highways, Albany N. Y.—Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock P.M. on Monday, the 30th day of July, 1917, for the construction and completion of highways in the following counties:

Albany.....	(two highways; 0.12 and 2.93)
Dutchess	(Approx. 6.18)
Hamilton	(Approx. 4.54)
Herkimer	(Approx. 5.10)
Lewis	(Approx. 8.82)
Livingston	(Approx. 8.34)
Madison	(Approx. 5.65)
Montgomery	(Approx. 7.10)
Nassau	(Approx. 1.57)
Niagara	(Approx. 0.61)
Oneida.....	(two highways; 0.70 and 1.05)
Onondaga	(Approx. 2.37)
Suffolk	(Approx. 9.57)
Westchester	(Approx. 4.29)
Wyoming	(Approx. 6.99)

And also for the following repair contract:

Washington ..(one contract—resurfacing)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the roads are to be improved. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

Bids received until August 6, 1917.

Concrete Arch Bridge

Camden, N. J.

Sealed proposals are invited for the erection of a three span concrete arch bridge 219 feet long, and 50 feet wide, and the approaches over Newton Creek, on Champion Road, Camden Co., N. J. All in accordance with plans and specifications which are on file with Fred W. George, Clerk, at the Court House, Camden, N. J., or he will mail the same to any address on receipt of $1.00.

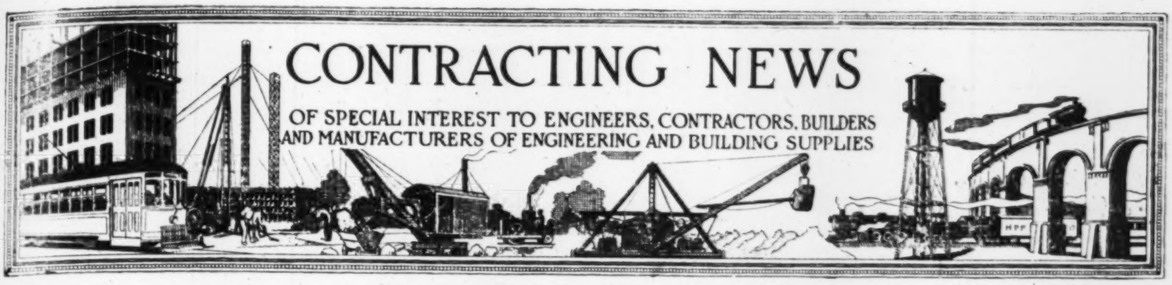
Bids will be received, immediately opened and publicly read at the Court House, Camden, N. J., on Monday, August 6th, 1917, at 10.30 a.m.

Dated, July 17, 1917.

FRED. W. GERCKE,
Chairman.

J. J. ALBERTSON,
County Engineer.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., July 19, 1917.—Sealed proposals will be opened in this office at 3 p.m., Aug. 30, 1917, for the construction of the United States post office at Franklin, Penn. Drawings and specifications may be obtained from the custodian of the site at Franklin, Penn., or at this office, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by heavy type; declines by *italics.*

PIG IRON

Below are the present quotations with a comparison of a month and a year ago.

	July 31, 1917	One Month Ago	One Year Ago
CINCINNATI			
No. 2 Southern foundry....	**$49.90**	$47.90	$16.90 to 17.90
No. 2 Northern foundry....	**56.26**	....	19.76 to 20.26
NEW YORK			
No. 2X Northern foundry..	**54.25**	50.25	19.70 to 20.25
No. 2 plain Northern foundry	**53.75**	49.25	19.50 to 20.00
No. 2 Southern foundry†...	**52.75**	49.25	19.50 to 20.00
BIRMINGHAM			
No. 2 Southern foundry....	**47.00**	45.00	14.00
CHICAGO			
No. 2 Northern foundry....	55.00	55.00	19.00
PITTSBURGH			
Bessemer iron*	55.95	55.95	21.00
Basic iron*	**53.95**	50.00	18.00

*These prices include the freight charge from the valley to the Pittsburgh district. †Delivered Tidewater, New York.

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per ton f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	July 31, 1917	One Year Ago	July 31, 1917	One Year Ago
Standard bessemer rails.	$38.00	$33.00	$38.00	$33.00
Standard openhearth rails	40.00	35.00	40.00	35.00
Light rails, 8 to 10 lb..	**83.00 to 84.00***	50.00	68.00	43.00
Light rails, 12 to 14 lb.	**82.00 to 83.00***	49.00	67.00	42.00
Light rails, 25 to 45 lb.	**75.00 to 80.00***	47.00	65.00	40.00

*Demand for light rails active and mills are obtaining premiums. Rerolled rails as valuable as new.

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh				
	July 31, 1917	One Year Ago	Chicago	St. Louis	San Francisco
Standard railroad spikes, $\frac{9}{16}$-in. and larger.......	**$5.00**	$2.65	$5.00	$5.75	$5.75
Track bolts	**6.75**	3.25	6.25	Premium	7.30
Standard section angle bars	3.65	2.00	4.00	Premium	4.65

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

	Material	6 In. x 8 in. by 8 Ft.	7 In. x 9 in. by 8 Ft. 6 In.
New York	Yellow Pine	$1.06 to 1.11	$1.25
St. Louis	No. 1 White Oak	1.00	.75
Chicago	White Oak	.97	.82
San Francisco..	Green	.77	*1.01*
San Francisco..	Creosoted	**1.20**	**1.62**

PIPE

PIPE—The following discounts are for carload lots f.o.b. Pittsburgh, as per basing card of July 2, 1917:

Steel			Iron		
Inches	Black	Galvanized	Inches	Black	Galvanized
BUTT WELD					
¾ to 3......	**42%**	**28%**	¾ to 1½......	**33%**	**17%**
LAP WELD					
2	**35%**	**22½%**	2	**26%**	**12%**
2½ to 6......	**35%**	**22½%**	2½ to 4......	**28%**	**15%**
7 to 12......	**29%**	**15½%**	4½ to 6......	**28%**	**15%**
13 and 14.....	32½%	....	7 to 12.......	**25%**	12%
15	30%	....			
BUTT WELD, EXTRA STRONG PLAIN ENDS					
¾ to 1½......	**40%**	**27½%**	¾ to 1½......	**33%**	**18%**
2 to 3........	**41%**	**28½%**			
LAP WELD, EXTRA STRONG PLAIN ENDS					
2	**33%**	**21½%**	2	**27%**	**14%**
2¼ to 4......	**36%**	**24½%**	2¼ to 4......	**29%**	**17%**
4½ to 6......	**35%**	**23½%**	4½ to 6......	**28%**	**16%**
7 to 8........	**31%**	**17½%**	7 to 8........	**20%**	**8%**
9 to 12.......	**20%**	**16½%**	9 to 12.......	**15%**	**3%**

From warehouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded............	38%	42.8%	**34.27%**
3½ to 6 in. lap welded............	28%	38.8%	**27.27%**
7 to 12 in. lap welded............	20%	35.8%	**21.27%**
	Galvanized		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded............	22%	27.8%	**19.27%**
3½ to 6 in. lap welded............	**10%**	**24.8%**	**13.27%**
7 to 12 in. lap welded............	10%	20.8%	**6.27%**

Malleable fittings, Class B and C, from New York stock sell at 5 and 5% from list prices. Cast iron, standard sizes, 34 and 5%.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York							
	July 31, 1917	1 Mo. Ago	One Yr. Ago	Birmingham	Chicago	St. Louis	San Francisco	Dallas
4 in.	$68.50	$68.50	$34.00	**$63.00**	$68.50	$67.00	**$75.00**	**$72.00**
6 in. and over	65.50	65.50	31.00	**60.00**	65.50	64.00	**73.00**	**69.00**

Gas pipe and 16-ft. lengths are $1 per ton extra.

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York					
Size, In.	July 31, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$0.111	$0.0725	.....	$0.09	$0.0675	**$0.1032**
4	.111	.0725	.....	.10	.09	**.1032**
5	.1665	.12	.....	.135	.1125	**.1548**
6	.1665	.12	$0.12	.15	.135	**.1548**
8	.255	.165	.165	.21	.2025	**.215**
10	.3885	.24	.23	.315	.30	**.301**
12	.4995	.30	.33	.405	.375	**.387**
15	.666	.405	.50	.54	....	**.559**
18	.925	.57	.75	.75	.75	**.731**
20	1.11	.675	.90	.90	.9625	**.86**
22	1.48	.90	1.13	1.20	1.155	**1.118**
24	1.665	.975	1.28	1.35	1.375	**1.29**
27	2.47	1.665	1.30	....	....	**1.935**
30	2.736	2.035	1.70	....	....	**2.365**
33	3.60	2.625	2.25	....	....	**3.05**
36	4.10	2.94	2.50	....	....	**3.44**
	Denver	Seattle	Boston	City	Orleans	St. Paul
3	**$0.07**	$0.075	$0.114	$1.10	**$0.0464**	**$0.081**
5	**.12**	.075	.171	.145	**.0725**	**.126**
8	**.19**	.225	.266	.18	**.135**	**.175**
12	**.31**	.4125	.513	.36	**.255**	**.315**
24	**1.14**	1.75	1.71	1.35	**1.00**	**1.35**
36	**2.10**	.....	4.2025	3.25	....	**2.83**

CLAY DRAIN TILE—The following prices are per 1000 lin.ft.:

	New York					
Size, In.	July 31, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$22.50	$18.40	$15.00	**$26.25**	**$19.80**
4	51.00	32.50	20.70	18.00	**33.75**	28.10
5	65.00	47.50	28.75	23.00	**48.75**	....
6	90.00	57.50	40.25	27.00	**67.50**	45.95
8	130.00	97.50	74.75	55.00	....	82.75

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices in tank cars 8000 gal. minimum f.o.b. places named:

New York, 40-50% asphalt......................	6½c. gal.
New York, 60-70% asphalt......................	7c. gal.
New York, dust layer..........................	7¼c. gal.
New York, binder	8¼c. gal.
St. Louis, 45-50% asphalt.....................	5c. gal.
Chicago, 15-20% asphalt.......................	6½c. gal.
Dallas, 40-50% asphalt........................	7c. gal.
Dallas, 60-70% asphalt........................	8c. gal.
San Francisco, 75-95% asphalt.................	* **$1.90** bbl.

Note—Barrel of 42 bulk gal.

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	**$30.00**	....
New York	Mexican*	19.00	14.00
Chicago	Mexican	24.00	20.00
St. Louis	Texaco or Mexican.......	22.50	19.50
San Francisco	California	14.50	12.50
Dallas	Texaco or Mexican.......	22.50	19.50
Seattle	....	....	16.00
Denver................	Trinidad	**40.00**	....
Denver................	California	**28.00**	....
Kansas City	Trinidad	26.00	....
Kansas City	Eexaco	21.00	....
St. Paul..............	Trinidad	25.40	....

*Nominal.

PAVING BRICK AND BLOCK—See "Brick" under "Construction Materials."

PAVING STONE—

		June 29, 1917
New York	Manhattan	$2.50 sq.yd.
	Other boroughs	2.25 sq.yd.
Boston	5-in. granite	**2.55** sq.yd.
Chicago	About 4x8x4 dressed...........	2.25 sq.yd.
	About 4x8x4 common...........	1.80 sq.yd.
San Francisco	Basalt block 4x7x8	57.75 per M
Kansas City	Limestone	2.00 sq.yd.
St. Paul	Sandstone	1.70 sq.yd.
New Orleans.........	3-in.	2.05 sq.yd.
	3½-in.	2.35 sq.yd.
	4-in.	2.65 sq.yd.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$2.00
New York	4	16	2.25
Chicago	4	16	*1.85*
Chicago	City specifications		2.10
St. Louis	3½	16	1.91
Seattle	4	16	1.47
Boston	4	20	2.02
Kansas City	4	16	1.95
St. Paul	Minneapolis specifications		2.00

FLAGGING—

		June 29, 1917
New York	Bronx	$0.17 sq.ft.
	Manhattan	.17 sq.ft.
	Queens, 5 ft. square	.18 sq.ft.
Chicago	18 in. wide	.75 lin.ft.

CURBING—Prices per linear foot are as follows:

New York	5 x 16	$0.45
	5 x 20	.50
Chicago	6 x 18	.60
St. Louis	5 x 16 square edge	.79
	5 x 16 bull nose	.95
San Francisco	5 x 16	.75
	5 x 20	.85

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

		Gravel				Sand	
		1½ In.		¾ In.			
	Paving	July 31, 1917	One Yr. Ago	July 31, 1917	One Yr. Ago	July 31, 1917	One Yr. Ago
New York	$1.25	$1.25	$0.90	$1.35	$1.00	$0.50	$0.50
Chicago	1.40	1.40	.85	1.40	.85	1.00	.85
St. Louis	....	1.08	.70	1.08	.70	1.08	.60
Dallas	....	1.50	....	1.50	....	1.10	....
San Francisco	2.00	1.00	1.00	1.00	1.00	1.00	.90
New Orleans	....	1.85	....	2.25	....	1.25	....
Denver	....	1.45	....	1.45	....	1.00	....
Kansas City	....	2.00	....	2.25	....	.60	....
Boston	....	1.50	....	1.60	....	.80	....
St. Paul	....	1.10	....	1.40	....	.50	....
Seattle	....	.75	....	.75	....	.75	....

Fine White Sand—St. Louis:

Pacific............$5.00 per ton Ottawa............$7.00 per ton

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In.		¾ In.	
	July 31, 1917	One Year Ago	July 31, 1917	One Year Ago
New York	$1.10	$0.85	$1.25	$0.95
Chicago	1.40	1.10	1.40	1.10
St. Louis	1.35	1.00	1.35	1.00
Dallas	1.42	....	....	....
San Francisco	1.00	1.00	1.00	1.00
Seattle	1.50	....	.1.50	....
Denver	1.45	....	....	....
Boston	1.40	....	*1.40*	....
Kansas City	1.50	....	1.60	....
St. Paul	1.00	....	1.10	....

LIME—Warehouse prices:

	Hydrated per Ton		Lump per 300-Lb. Barrel	
	Finished	Common	Finished	Common
New York	$16.50	$13.25	$2.10	$1.90
Chicago	15.00	12.00	....	....
St. Louis	12.00	10.75	....	....
Dallas	20.00	15.00	....	....
San Francisco	18.50	....	....	1.65

ROSENDALE NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., including bags:

New York $1.15

30c. allowed for bags.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags:

	July 31, 1917	One Month Ago	One Year Ago
New York	$2.22	$2.22	$1.72
Jersey City	2.16	2.16	1.66
Boston	2.77	2.77	1.92
Chicago	2.31	2.31	1.81
Pittsburgh	2.31	2.31	1.81
Cleveland	2.44	2.44	1.94
Detroit	2.40	2.40	1.90
Indianapolis	2.44	2.44	1.94
Toledo	2.44	2.44	1.94
Milwaukee	2.43	2.43	1.93
Minneapolis	2.58	2.58	2.08
Duluth	2.51	2.51	1.96
Peoria	2.43	2.43	1.89
Cedar Rapids	2.54	2.54	2.00
Davenport	2.49	2.49	1.90
St. Louis	2.45	2.45	1.85
Denver	2.39	2.39	...
San Francisco	2.30	...	2.30
Dallas	2.15	2.15	...
Los Angeles	2.40	2.40	...
New Orleans	2.58	2.56	...
Kansas City	2.29	2.29	...
Cincinnati	2.70	2.70	...
St. Paul	2.63	2.63	...
Seattle	2.65	...	...

TRIANGLE MESH REINFORCEMENT—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.89	$0.92	$0.93	$0.94	$1.06	$1.20
049	0.049	1.13	1.18	1.18	1.20	1.34	1.55
068	0.068	1.42	1.47	1.49	1.50	1.68	1.97
093	0.093	1.82	1.89	1.91	1.92	2.17	2.47
126	0.126	2.31	2.39	2.42	2.44	2.74	3.15
153	0.153	2.75	2.86	2.88	2.91	3.27	3.75
180	0.180	3.16	3.27	3.31	3.34	3.76	...
245	0.245	4.17	4.33	4.36	4.41	4.96	6.12
287	0.287	4.82	5.00	5.04	5.10	5.72	...
336	0.336	5.59	5.80	5.85	5.92	6.66	...
395	0.395	6.48	6.72	6.78	6.86	7.73	...

PLAIN 4-IN. x 8-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
036P	0.036	.69	.71	.72	.73	.82	...
053P	0.053	.97	1.01	1.02	1.03	1.16	...
072P	0.072	1.26	1.30	1.32	1.33	1.50	...
097P	0.097	1.62	1.68	1.70	1.71	1.93	...
049R	0.049	.97	1.01	1.02	1.03	1.15	1.97
067R	0.067	1.26	1.30	1.32	1.33	1.50	...
089R	0.089	1.62	1.68	1.70	1.71	1.93	...

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized runs about 10% higher than plain.

EXPANDED METAL LATH—Prices per 100 yd. for painted are as follows:

Carlod

		New York					
Gage	Weight	July 31, 1917	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$31.00	$17.00	$31.00	$34.00	$29.00	[illegible]
26	250	32.03	18.00	32.00	35.00	30.25	....
25	300	33.13	19.00	33.00	....	....	....
24	340	34.25	20.00	34.00	37.00	33.00	36.00
22	450	36.44	23.00	36.00	....	....	....

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING—The following quotations are per 100 lb.:

ROLLED FROM BILLETS

		Warehouse					
		New York					
In.	Mill Shipment	July 31, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
¾ and larger	*	$5.10	$3.25	$4.736	$4.50	$6.00	$4.75
⅝	*	5.15	3.35	4.786	4.55	6.05	4.80
½	*	5.20	3.40	4.836	4.60	6.10	4.85
⅜	*	5.35	3.65	4.986	4.75	6.25	5.00
¼	*	5.60	4.00	5.236	5.00	6.50	5.25

*Mill quotations on actual specifications.

ROLLED FROM RAILS

	St. Louis	Dallas		St. Louis	Dallas
¾ in. and larger	$4.00	$4.75	⅜	$4.25	$5.00
⅝	4.05	4.80	¼	5.00	5.25
½	4.10	4.85			

BRICK—The price per 1000 in cargo or carload lots is as follows:

	Common			Paving	
	July 31, 1917	One Month Ago	One Year Ago	Brick	Block
New York	*$8.50*	$9.00	$7.75	$25.00	$35.00
Chicago	8.00	8.00	6.00	*16.00*	24.00
Ct. Louis, salmon	7.00	7.00	9.00	....	....
St. Louis, selected	10.00	10.00	9.00	....	....
Denver	8.00	8.00	....	....	14.00
San Francisco	10.00	....	10.00	....	....
Dallas	8.10	8.10	....	22.00	22.50
New Orleans	9.00	9.00	....	....	27.50
Kansas City	11.00	11.00	....	....	....
Boston	13.25	13.25	....	....	25.00
Seattle	9.00	....	....	....	28.75
St. Paul	8.70	....	....	....	27.00

HOLLOW TILE—Hollow building tile price per block in cents:

	New York					
	July 31, 1917	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4x12x12	$0.0925	$0.065	$0.07895	$0.054	$0.0825	$0.07
6x12x12	.1295	.091	.11845	.066	.11	.09
8x12x12	.15725	.11	.1369	.09	.1275	.12
10x12x12	.185	.13	.1579	.15	.20	.15
12x12x12	.23125	.1625	.2053	.18	.22	.18

	4x12x12	8x12x12	12x12x12
Boston	$0.0957	$0.171	$0.2266
St. Paul	*.055*	*.103*	*.138*
Kaansas City	.0595	.1125	.1575
Denver	.09	.17	.25
New Orleans	.0892	.1417	.1863
Seattle	.06	.10	.16

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

		New York					
	Pittsburgh	July 31, 1917	1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in.	$4.50	$5.25	$2.50	$5.05	$5.00	$7.75	$6.00
Channels, 3 to 15 in.	4.60	5.25	2.50	5.05	5.00	7.75	6.00
Angles, 3 to 6 in., ¼ in. thick	4.50	5.25	2.50	5.05	5.00	7.75	6.25
Tees, 3 in. and larger	4.50	5.30	2.50	5.05	5.05	7.75	6.25
Plates	9.00	9.00	2.90	8.05	8.00	10.00	9.00

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

		Warehouse				
	Mill, Pittsburgh	New York	Chicago	St. Louis	San Francisco	Dallas
¾ in. and larger	$5.25	$7.00	$5.50	$5.55	$6.65	$8.40

CONE HEAD BOILER

¾ in. and larger	5.35	7.10	5.60	5.65	6.75	8.50
⅝ and 11/16	5.50	7.25	5.75	5.80	6.90	8.65
½ and 9/16	5.85	7.60	6.10	6.15	7.25	9.00

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York and Chicago:

	1-Ply		2-Ply		3-Ply	
	c.l.	l.cl.	c.l.	l.cl.	c.l.	l.cl.
No. 1 grade	$1.15	$1.30	$1.45	$1.60	$1.75	$1.90
No. 2 grade	1.00	1.15	1.25	1.40	1.50	1.65

Asbestos asphalt-saturated felt (14 lb. per square) costs $6.50 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $1.85 per roll in carload lots and $2.10 for smaller quantities.

Shingles, red and green slate finish, cost $4.75 per square in carloads, $5 in smaller quanties, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York or Chicago:

	Carload Lots	Less Than Carload Lots
Tar felt (14 lb. per square of 100 sq.ft.)	$59.00	$60.00
Tar pitch (in 400-lb. bbl.)	15.00	*16.50*
Asphalt pitch (in barrels)	29.00	30.50
Asphalt felt	60.00	62.00

CORRUGATED SHEETS—Price of corrugated sheets (2½-in. corrugations) in cents per pound:

Gage		Cincinnati	Birmingham	St. Louis	Denver
18-20	Black	$18.00*	....	$0.092	....
28	Black	5.75*	....	.094	$0.10
18-20	Galvanized	22.50*	$0.11	....	....
28	Galvanized	8.75*	.12	.113	.12

*Price per square of 100 sq.ft.

SHEETS—Price in cents per pound:

Blue Annealed	Large Lots. Pittsburgh	St. Louis	Chicago	San Francisco	New York July 31, 1917	New York One Yr. Ago
No. 10	**8.25**	9.55	9.50	10.50	**10.00**	4.25
No. 12	**8.65**	9.60	9.55	10.55	**10.05**	4.30
No. 14	**8.85**	9.65	9.60	10.60	**10.10**	4.35
Black						
Nos. 18 and 20	**8.55**	**9.65**	9.30	10.80	**10.30**	3.45
Nos. 22 and 24	**8.60**	**9.70**	9.35	10.83	**19.35**	3.50
No. 26	**8.65**	**9.75**	9.40	10.88	**10.40**	3.55
No. 28	**8.75**	**9.85**	9.50	10.98	**10.50**	3.65
Galvanized						
No. 10	**9.50**	10.45	9.70	....	....	....
No. 12	**9.60**	10.45	9.70	12.15	....	4.50
No. 14	**9.75**	10.45	9.70	12.15	**12.10**	**4.50**
Nos. 18 and 20	**9.90**	10.65	10.00	12.45	**12.40**	4.80
Nos. 22 and 24	**10.30**	10.80	10.15	12.62	**12.55**	4.55
No. 26	**10.45**	10.95	10.20	12.77	**12.70**	....
No. 28	**10.75**	11.25	10.50	13.06	**13.00**	5.00

LINSEED OIL—These prices are per gallon:

	New York July 31, 1917	New York One Year Ago	Cleveland July 31, 1917	Cleveland One Year Ago	Chicago July 31, 1917	Chicago One Year Ago
Raw in barrels	$1.16	$0.71	$1.20	$0.73	$1.21	$0.73
5-gal. cans	1.26	.81	1.35	.83	1.36	.83

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red July 31, 1917 Dry	Red July 31, 1917 In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White July 31, 1917 Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	13.25	13.50	10.50	11.00	13.00	10.50
25- and 50-lb. kegs	13.50	13.50	10.75	11.25	13.25	10.75
12½-lb. keg	13.75	14.00	11.00	11.50	13.50	11.00
1 to 5-lb. cans	15.25	15.50	12.50	12.50	15.50	12.50

LUMBER—Price per M in carload lots:

Square Edge and Sound Green

	Southern Pine New York 20 Ft. and Under	Southern Pine New York 22-24 Ft.	Southern Pine Chicago 20 Ft. and Under	Southern Pine Chicago 22-24 Ft.	Yellow Pine St. Louis 20 Ft. and Under	Yellow Pine St. Louis 22-24 Ft.
3x 4 to 8x 8	*$33.75*	*$34.75*	*$31.75*	*32.75*	28.75	29.75
3x10 to 10x10	*35.75*	*36.75*	*33.75*	*34.75*	*30.75*	*31.75*
3x12 to 12x12	*38.75*	*39.75*	*36.75*	*37.75*	*33.75*	*34.75*
3x14 to 14x14	41.75	42.75	39.75	40.75	36.75	37.75
3x16 to 16x16	**46.75**	**47.75**	**44.75**	**45.75**	**41.75**	**42.75**
3x18 to 18x18	51.75	52.75	49.75	50.75	46.75	47.75
4x20 to 20x20	56.75	57.75	54.75	55.75	51.75	52.75

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Prices from Lumberman's Bureau.

Yellow Pine—Dallas. Price per M:

2x4 to 2x12—12 to 16 ft. long	$32.50
2x4 to 2x12—10, 18 and 20 ft. long	35.00
2x4 to 2x12—22 and 24 ft. long	37.50
4x4, 4x6, 6x6, 8x8, 3x8	37.50
8x10, 10x10, 3x10	40.00
12x12, 3x12	40.00

Rough Douglas Fir, No. 1 Common—More than carload lots in San Francisco:

Size in Inches	15 Ft. and Under	16 to 24 Ft.	25 to 32 Ft.
3 and 4x4	$22.00	$23.50	$34.50
3 and 4x6 and 8	22.00	22.50	23.50
6x6 to 8x8	22.50	23.50	23.50
3 and 4x10	22.00	23.50	24.50
6 and 8x10	23.00	24.00	24.00
10x10	23.00	23.00	25.00
3 and 4x12	22.00	23.50	24.50
6 and 8x12	23.50	24.50	24.50
10 and 12x12	23.00	23.00	25.00
3 and 4x14	23.00	25.00	26.00
6 and 8x14	24.50	25.50	25.50
7 and 9x14	25.50	26.50	26.50
10 and 12x14	24.00	24.00	26.00

	1-In. Rough 10 In. x 16 Ft and Under Y.P.	Fir	Hemlock	2-In. T. and G. 10 In. x 16 Ft. Y.P.	Fir
Boston*	....	....	....	....	....
Kansas City	$44.00	$44.50	$43.00	$52.00	....
Seattle	18.50	18.50	18.50	18.50	18.50
New Orleans	*26.00*	....	....	*28.00*	....
St. Paul	....	51.00	33.50	59.00	37.50
Denver	30.00	*30.00*	27.50	....	*30.00*

	8 x 8-In. x 20 Ft. and Under Y.P.	Fir	Hemlock	Spruce	12 x 12-In., 20 Ft. and Under Y.P.	Fir
Boston*	....	....	....	$40.00	....	....
Kansas City	$39.00	$35.00	$35.00	....	$45.00	$35.00
Seattle	18.50	18.50	18.50	$18.50	18.50	18.50
New Orleans	*24.50*	....	....	....	30.00	....
St. Paul	....	40.00	31.50	32.00	....	45.00
Denver	....	*30.00*	30.00	....	30.00	....

*Prices demoralized; no standing quotations.

NAILS—The following quotations are per keg from warehouse:

	Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	$4.00	$4.50	$4.45	$4.60	$4.35
Cut	4.65	5.00	4.65	6.15	...

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Baltimore	15.4	Minneapolis	32.9
Boston	18.9	New Orleans	30.7
Buffalo	11.6	New York	16.9
Chicago	18.9	Pacific Coast (all rail)	75.0
Cincinnati	15.8	Philadelphia	15.9
Cleveland	10.5	St. Louis	23.6
Denver	68.6	St. Paul	32.9
Kansas City	43.6		

WATER TREATMENT CHEMICALS—Prices per lb. in New York are as follows:

Sulphate of alumina (iron free)	$0.045	(in 400-lb. bbl.)
Hypochlorite of lime	.03	(in 700-lb. drums)
Soda ash	.04	(in 400-lb. bbl.)
Liquid chlorine	.175	f.o.b. Niagara Falls

Liime is quoted separately, on next page.

CONTRACTORS' MISCELLANEOUS SUPPLIES

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

July 31, 1917	One Month Ago	One Year Ago
$4.50 to $5.00	$3.60 to 4.00	$2.50

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York July 31, 1917	New York One Year Ago	St. Louis	Chicago	San Francisco
Galvanized	10—2½%	25—2½%	10—2½%	10—2½%	15%
Bright	20—2½%	35—2½%	20—2½%	*20—2½%*	5%

MANILA ROPE—For rope smaller than ⅝-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅝-in., 8 ft.; ¾-in., 6; ⅞-in., 4½; 1-in., 3½; 1⅛-in., 2 ft. 10 in.; 1¼-in., 2 ft. 4 in. Following is price per pound for ⅝-in. and larger, in 1200-ft. coils:

Boston	$0.34	New Orleans	$0.31
New York	.33½	Seattle	.31½
Denver	.36	St. Paul	.31½
Kansas City	.31½		

EXPLOSIVES—Price per pound in small lots at cities named:

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	Gelatin 80%	Black Powder*
New York	......	$0.26½	$0.33½	......	$2.35
Boston	......	......	.33¼	.40¾*	....
Kansas City	.19	.25¼	.30¼	.36½	....
New Orleans	.20¼	.24¼	.29¼	......	....
Seattle	*.17½*	.23¾	.30¾	......	....
St. Paul	.19	.25¼	.32¼	.42¼	2.35
St. Louis	.15½	.21½	.29½	.34¾	1.95
Denver	.18	.24¼	.31¼	.41¼	....

*75%.

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York July 31, 1917	New York One Month Ago
Heavy melting steel scrap	$29.00 to 30.00	$29.00
No. 1 railroad wrought	*42.00* to *43.00*	50.00
Stove plate	*20.00* to *21.00*	22.00
No. 1 machinery cast	34.00 to 35.00	35.00
Machine shop turnings	*18.00* to *19.00*	21.50
Cast borings	*18.00* to *19.00*	22.00
Railroad malleable cast	**33.00 to 34.00**	32.00

	Chicago July 31, 1917	Chicago One Month Ago
No. 1 railroad wrought	*$35.00*	$44.00
Stove plate	*18.50*	24.50
No. 1 machinery cast	*28.50*	32.00
Machine shop turnings	*17.00*	20.00
Cast borings	*17.50*	19.50
Railroad malleable cast	*29.00*	35.00

	St. Louis July 31, 1917	St. Louis One Month Ago
Heavy melting steel scrap	*$37.00* to *38.00**	$44.00
No. 1 railroad wrought	*36.00* to *37.00*	40.00
Stove plate	*18.00* to *18.50*	22.00
No. 1 machinery cast	*25.00* to *26.00*	30.00
Machine shop turnings	**19.00 to 19.50**	18.50
Cast borings	**17.50 to 18.00**	16.50
Railroad malleable cast	**29.50 to 30.00**	27.00

*Per gross ton.

Proposals

For Proposals Advertised See Pages 61 to 66 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Aug. 16.	Waterloo, Ia.	July 26
Aug. 2.	Akron, O.	June 26
Aug. 6.	New York, N. Y.	Aug. 2
Aug. 7.	New York, N. Y. Adv. July 26.	July 26
Aug. 9.	Atlantic City, N. J.	Aug. 2
Aug. 13.	Red Rock, Okla.	Aug. 2
Aug. 20.	Cumberland, Md. Advertised Aug. 2	Aug. 2
Aug. 25.	San Francisco, Cali.	Aug. 2
Sept. 11.	New York, N. Y.	July 12

SEWERS

Bids Close		See Eng. News-Record
Aug. 6.	Cleveland Heights, O.	July 19
Aug. 7.	Caledonia, Minn.	July 26
Aug. 8.	Dardanelle, Ark.	July 26
Aug. 9.	Newark, N. J.	Aug. 2
Aug. 10.	Piqua, O.	Aug. 2
Aug. 14.	Lebanon, O.	July 26
Aug. 14.	Toronto, Ont.	Aug. 2

BRIDGES

Bids Close		See Eng. News-Record
Aug. 6.	Camden, N. J.	Aug. 2
Aug. 6.	Fairfield, Cal.	Aug. 2
Aug. 6.	Canton, O.	Aug. 2
Aug. 6.	San Jose, Cal.	Aug. 2
Aug. 6.	Elkhart, Ind.	Aug. 2
Aug. 6.	Waseca, Minn.	Aug. 2
Aug. 6.	Grundy, Va.	Aug. 2
Aug. 9.	Hartford, Ky.	Aug. 2
Aug. 10.	La Grange, Ky.	Aug. 2
Aug. 14.	Tehamah, Neb.	Aug. 2
Aug. 14.	Somis, Cal.	Aug. 2
Aug. 16.	Salem, N. J.	Aug. 2
Aug. 22.	Troy, O.	Aug. 2
Aug. 27.	Elberton, Ga.	Aug. 2
Aug. 30.	Kankakee, Ill.	Aug. 2

STRUCTURAL STEEL WORK

Bids Close		See Eng. News-Record
Aug. 3.	Albany, N. Y. Adv. July 19 to Aug. 2.	July 19
Aug. 6.	Camden, N. J. Adv. July 26.	July 26
Aug. 6.	Spencer, Ind.	July 19
Aug. 6.	Rio Vista, Cal.	July 26
Aug. 9.	Vancouver, Wash.	July 26
Aug. 9.	Portland, Ore.	July 26
Aug. 14.	Brazil, Ind.	July 12
Aug. 14.	Fairmont, W. Va.	July 23
Aug. 16.	Hamlin, W. Va.	July 12
Aug. 21.	Albany, N. Y. Adv. July 26 and Aug. 2.	July 26

REINFORCED CONCRETE

Bids Close		See Eng. News-Record
Aug. 6.	Greenville, Miss.	July 12
Aug. 6.	Columbus, O.	July 19
Aug. 6.	Santa Barbara, Cal.	July 26
Aug. 6.	Camden, N. J.	July 26
Aug. 7.	Columbus, Mo.	July 26
Aug. 9.	South Bend, Wash.	July 26
Aug. 13.	Spencer, W. Va.	July 19
Aug. 22.	Beatrice, Neb.	July 19

STREETS AND ROADS

Bids Close		See Eng. News-Record
Aug. 6.	Clifton, Ariz.	July 12
Aug. 6.	Kittanning, Pa.	July 26
Aug. 6.	Tunica, Miss.	July 26
Aug. 6.	Cincinnati, O.	July 26
Aug. 6.	California	July 26
Aug. 6.	Poplar Bluffs, Mo.	July 26
Aug. 6.	Indiana	July 26
Aug. 6.	S. I.: St. George, N. Y.	Aug. 2
Aug. 6.	Dayton, O.	Aug. 2
Aug. 6.	New Orleans, La.	Aug. 2
Aug. 6.	Owensboro, Ky.	Aug. 2
Aug. 6.	Jefferson City, Mo.	Aug. 2
Aug. 5.	Burlington, Ia.	Aug. 2
Aug. 6	De Vall Bluff, Ark.	Aug. 2
Aug. 6.	Council Bluff, Ia.	Aug. 2
Aug. 7.	Indiana	July 26
Aug. 7.	Wallace, Idaho	July 26
Aug. 7.	Indiana	July 12
Aug. 7.	Houston, Tex.	July 19
Aug. 7.	Huntsville, Tex.	July 19
Aug. 7.	Pennsylvania	July 19
Aug. 7.	Camden, N. J.	July 26
Aug. 7.	Paterson, N. J.	July 26
Aug. 7.	Billings, Mont.	July 26
Aug. 7.	Friar Point, Miss.	Aug. 2
Aug. 7.	Grand Island, Neb.	Aug. 2
Aug. 7.	Buffalo, N. Y.	Aug. 2
Aug. 7.	Wabash, Ind.	Aug. 2
Aug. 7.	S. I., St. George, N. Y.	Aug. 2
Aug. 7.	Rockville, Mo.	Aug. 2
Aug. 8.	Santa Ana, Cal.	July 19
Aug. 8.	Indianapolis, Ind.	July 26
Aug. 8.	Indiana	July 26
Aug. 8.	Canton, O.	Aug. 2
Aug. 8.	New York, N. Y.	Aug. 2
Aug. 8.	Santa Ana, Cal.	Aug. 2
Aug. 8.	Mountainside, N. J.	Aug. 2
Aug. 8.	Atlantic City, N. J.	Aug. 2
Aug. 8.	Elizabeth, N. J.	Aug. 2
Aug. 9.	South Bend, Wash.	July 26
Aug. 9.	Portsmouth, Va.	Aug. 2
Aug. 9.	New York, N. Y.	Aug. 2
Aug. 9.	Coshocton, O.	Aug. 2
Aug. 9.	Alberquerque, N. M.	Aug. 2
Aug. 10.	Indiana	July 26
Aug. 10.	Uniontown, Pa.	July 26
Aug. 10.	Seattle, Wash.	Aug. 2
Aug. 10.	Walla Walla, Wash.	Aug. 2
Aug. 10.	Boise, Idaho	Aug. 2
Aug. 11.	Indiana	July 26
Aug. 11.	Westerville, O.	Aug. 2
Aug. 11.	Whitley City, Ky.	Aug. 2
Aug. 13.	Lewiston, Idaho	May 24
Aug. 13.	Ashland, Ala.	July 26
Aug. 13.	Indiana	July 26
Aug. 13.	Centerburg, O.	July 26
Aug. 13.	Plattsmouth, Neb.	Aug. 2
Aug. 13.	Cincinnati, O.	Aug. 2
Aug. 13.	Sandusky, O.	Aug. 2
Aug. 14.	New Bedford, N. J.	July 19
Aug. 14.	Pennsylvania Adv. July 26 and Aug. 2.	July 26
Aug. 14.	Freehold, N. J.	Aug. 2
Aug. 14.	St. Louis, Mo.	Aug. 2
Aug. 14.	Salt Lake City, Utah	Aug. 2
Aug. 14.	Tampa, Fla.	Aug. 2
Aug. 15.	Canton, O.	Aug. 2
Aug. 15.	Ohio	Aug. 2
Aug. 15.	Medina, O.	Aug. 2
Aug. 15.	Pioneer, O.	Aug. 2
Aug. 16.	Hamlin, W. Va.	July 12
Aug. 16.	Ohio	Aug. 2
Aug. 16.	Savannah, Tenn.	Aug. 2
Aug. 16.	Hazards, Ky.	Aug. 2
Aug. 17.	Jenkins, Ky.	Aug. 2
Aug. 17.	Cincinnati, O.	Aug. 2
Aug. 20.	Indiana	July 26
Aug. 20.	Washington	Aug. 2
Aug. 21.	Stone Harbor, N. J.	Aug. 2
Aug. 27.	Newark, N. J.	Aug. 2

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Aug. 6.	Mottville, Mich. Adv. July 26.	July 26

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Aug. 5.	New Ulm, Minn.	July 26
Aug. 6.	Paxton, Ill.	July 26
Aug. 6.	Mason City, Ia.	Aug. 2
Aug. 7.	Ft. Madison, Ia. Adv. July 26 and Aug. 2.	July 26
Aug. 7.	Jersey City, N. J.	July 26
Aug. 7.	Jefferson City, Mo.	Aug. 2
Aug. 9.	Centre City, Minn.	July 26
Aug. 9.	Mankato, Minn.	Aug. 2
Aug. 10.	Lewiston, Ill.	July 26
Aug. 10.	Portsmouth, O.	Aug. 2
Aug. 13.	Sibley, Ia.	Aug. 2
Aug. 17.	Fairbault, Minn.	Aug. 2
Aug. 20.	Des Moines, Ia.	July 26
Aug. 20.	Des Moines, Ia.	Aug. 2
Aug. 24.	Memphis, Tenn.	Aug. 2
Oct. 2.	St. Cloud, Minn.	Aug. 2

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 3.	Columbus, O.	Aug. 2
Aug. 6.	Cheyenne, Wyo.	July 19
Aug. 6.	Santa Barbara, Cal.	July 19
Aug. 7.	Cleveland, O.	Aug. 2
Aug. 7.	Columbus, O.	Aug. 2
Aug. 5.	North Raymond, Me.	Aug. 2
Aug. 7.	New York, N. Y. Adv. July 26 and Aug. 2.	July 26
Aug. 7	Youngstown, O.	July 26
Aug. 8.	Great Bend, Kan.	July 19
Aug. 8.	McPherson, Kan.	Aug. 2
Aug. 8.	New York, N. Y.	Aug. 2
Aug. 8.	Morristown, N. J.	Aug. 2
Aug. 9.	Loveland, O.	July 26
Aug. 10.	Fall River, Mass.	July 26
Aug. 10.	Bedford, O.	July 26
Aug. 10.	Vergennes, Vt.	Aug. 2
Aug. 13.	Winnfield, La.	Aug. 2
Aug. 13.	Mason City, Ia.	July 26
Aug. 15.	Tower, Minn.	Aug. 2
Aug. 15.	Hudson Falls, N. Y.	Aug. 2
Aug. 15.	Burnaby, B. C.	Aug. 2
Aug. 17.	Cohoes, N. Y.	July 26
Aug. 20.	Troy, N. Y.	July 12
Aug. 22.	Greensboro, N. C.	July 26
Aug. 22.	Modesto, Cal.	Aug. 2
Aug. 24.	New Brunswick, N. J.	July 26

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Aug. 6.	Globe, Ariz.	July 5
Aug. 6.	Charleston, S. C.	July 26
Aug. 11.	St. Louis, Mo.	July 26
Aug. 13.	Ft. Mifflin, Penn.	Aug. 2
Aug. 14.	West Point, Ga.	July 12
Aug. 17.	Washington, D. C.	July 12
Aug. 20.	GGlenwood Springs, Colo.	Aug. 2
Aug. 20.	Washington, D. C.	Aug. 2
Aug. 21.	Grand Haven, Mich. Adv. July 26 and Aug. 2.	July 26
Aug. 30.	Franklin, Pa. Adv. July 26 and Aug. 2.	July 26
Sept. 4.	McKees Rocks, Penn.	Aug. 2
Sept. 5.	Torrington, Wyo. Adv. July 26.	July 26
Sept. 5.	Washington, Ga.	Aug. 2
Sept. 6.	Forsyth, Ga.	Aug. 2

MISCELLANEOUS

Bids Close		See Eng. News-Record
Aug. 6.	Air Compressors—Galesburg, Ill. Adv. July 26 and Aug. 2.	July 26
Aug. 8.	Incinerator—Brookline, Mass.	Aug. 2
Aug. 21.	Piers—Albany, N. Y. Adv. July 26 and Aug. 2.	July 26
Aug. 22.	Tunnels—San Francisco, Cal. Adv. July 19.	July 19
Aug. 25.	Incinerator—Paducah, Ky.	Aug. 2

Where name of official is not given, inquiries shou'd be addressed to City Clerk County Clerk or corresponding official

WATER-WORKS

Proposed Work

N. Y., New York—(Official)—Bd. Water Supply rejected bid, contract 187, fitting up chemical and bacteriological laboratory, etc., lower gate chamber Ashokan reservoir, Olive Twp. Noted July 19.

N. J., Jersey City—City plans to lay new water mains in Arlington Sect. About $15,000. R. M. Dolan, clk.

N. J., Rahway—Bd. Water Comrs. plans to improve water system. About $25,000. Address A. J. Wendell.

N. J., South Orange—See "Sewers."

O., Dayton—City had plans prepared by Metcalff & Eddy, engrs., 14 Beacon St., Boston, Mass., building 10,000,000 gal. reservoir in southeastern part of city. Noted May 10.

Mich., Gladstone—City plans to install 500,000 gal. concrete reservoir. About $16,000.

Wis., Niagara—City election soon to vote on $35,000 bond issue to build waterworks system.

Kan., Palo—City voted $30,000 to build waterworks system and electric light plant. G. P. Taylor, Stockton, engr.

Kan., Towanda—City election Aug. 7, to vote on $25,000 bond issue to improve waterworks. A. E. Dudney, clk.

Mont., Philipsburg—City election Aug. 4 to vote on $10,000 bond issue to construct reservoir. W. Neu, clk.

Tex., El Paso — City plans to enlarge waterworks system. About $100,000. W. E. Race, supt.

Tex., Pleasanton—City soon lets contract building waterworks plant and distributing system. About $20,000.

Tex., Waco—City plans to build 1,500,000-gal. reservoir to supply army camp. S. J. Quay, supt.

Okla., Bristow—City election for Aug. 16, to vote on $12,000 bond issue water-works and sewer extensions. Noted June 21.

Water-Works (Continued)

Okla., **Norman**—City election soon to vote on $10,000 bond issue to construct reservoir and pump house.

Okla., **Shamrock**—City election Aug. 4 to vote on $40,000 bond issue to build waterworks.

Wash., **Waitsburg**—City election Aug. 20 to vote on $50,000 bonds to construct waterworks system.

Cal., **Corcoran**—City soon lets contract constructing waterworks system. About $60,000 W. R. Mayer, supt.

Cal., **El Centro**—City election Sept. 20, to vote on $50,000 bonds to build filtration plant, capacity 3,000,000 gal.

Cal., **Los Angeles**—Pub. Ser. Comn. secured site near Chatsworth Park and plans to build reservoir, 9,000,000-gal. capacity, 3 dams, earth and rock, from 25 to 75 ft. high and 7 earth dikes. About $ 50,000. W. Mulholand, Knickerbocker Bldg., ch. engr.

Cal., **Santa Barbara**—City Comrs. to sell $90,000 bonds of $590,000 recently voted to construct concrete lined earth reservoir on Mission Ridge, pipeline from Santa Barbara portal of tunnel to reservoir, and to start preliminary work for concrete dam on Gibralter damsite. J. B. Lippincott, Central Bldg Los Angeles. engr Noted May 17.

Ont., **Ojibway**—See "Sewers."

BIDS DESIRED

N. Y., **New York**—Until Aug. 6, by W. Williams, comr. water supply. Gas and electricity, Municipal Bldg., for furnishing delivering, unloading stacking and storing c.-i. box castings valves, and double-nozzle fire hydrants

Md., **Cumberland**—(Official)—Until Aug. 20, by A. W Straub, city clk., for 7,000,000 gal. reservoir in Ridgedale Addition; advertised in this issue.

Okla., **Red Rock**—Until Aug. 13, by Bd. Trustees, for building waterworks system; including sinking open caisson well, pump house and installing 250 r.p.m. 200-ft. head triplex pump, etc. About $22,000. Noted Apr. 5.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., **New York** — (Official) — Dept. Water Supply, Gas and Electricity received low bids, July 17, furnishing, delivering, unloading, stacking and storing c.-i. pipe special and valve-box castings, valve and double nozzle fire hydrants as follows: R. D. Wood & Co., 400 Chestnut St., Phila., Sect. 1, $48.505; Ornamental Fdry. Co., Anniston, Ala., Sect. 2, $13.690; T. J. Radley Co., 143 Liberty St., Sect. 3, $9850; A. P. Smith Mfg. Co., East Orange, $7999.

★N. Y., **New York**—(Official)—Bd Water Supply let Contract No. 29, completing superstructure over drainage chamber, Shaft 21 city tunnel, Catskill Aqueduct, to Lustig & Weil, 103 Park Ave., $61,516.

★N. Y., **New York**—(Official)—Bd Water Supply let contract No. 184, paving vitr. brick, Kensico Aerator, Mt. Pleasant, to H. E. Fox Constr. Co., 81 East 125th St., $42,850. Noted July 19.

★N. Y., **New York**—(Official)—Bd. Water Supply let Contract No. 179, surfacing with vitr. brick block about 2000-ft. highways, Kensico Dam, North Castle to Empire Eng. Co., 6 Church St., $39,695. Noted July 2.

N. J., **Newark**—Bd. Wks. received low bid building meter recording station, Bloomfield Ave. and North 6th St. from F. McCue, 142 Market St., $12,496.

★Ga., **Macon**—C. T. Williamson, chn. water com., let contract extending water mains from East Macon to cantonments at Holley Bluff to U. S. Cast Iron Pipe & Fdry. Co., 30th Ave., Birmingham, $45,000. Noted June 14.

★Ia., **Waverly**—(Official)—City let contract installing 200,000-gal. rein.-con. reservoir to C. H. J. H. Russell, Waverly, $14,-154; 1200-ft. 12-in. c. i. pipe to W. A. Edgar, Cedar Rapids, $6600. Noted July 12.

★Minn., **Duluth**—(Official)—City let contract 500 tons c. i. pipe to U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago. Noted July 19.

★Kan., **Chanute**—City let contract improving waterworks to Chanute Constr. Co., Chanute, $25,000. Noted July 5.

★Kan., **Junction City** — (Official) — City let contract concrete reservoir to Lyon & Paterson, Salina, $12,873. Noted July 19.

★Kan., **Pittsburg**—City let contract 4,-000,000 gal. crank and flywheel pumps to H. R. Worthington Co., 824 Scarritt Bldg., Kansas City, Mo., $18.400; also 6,000,000-gal. centrifugal pump to Allis Chalmers Mfg. Co., West Allis, Wis., $7661. Noted July 5.

Wyo., **Casper**—City received low bid improving water-works from W. F. Henning, Casper, $98,200. Noted July 5.

★Colo., **Colorado Springs**—City let contract laying water pipe line extensions to J. Schwartz, 1015 East Boulder St., $41,900. Noted May 10.

★Colo., **Colorado Springs**—City let contract addition to Reservoir No. 4, to increase capacity from 660,000,000 gal. to 864,000,000 gal., to H. J. Reid, Colorado Springs. About $35,000. Noted June 28.

★Ariz., **Winslow**—Atchison, Topeka & Sante Fe R.R. let contract 5,000,000-gal. rein.-con. reservoir and filtration plant on Clear Creek to C. W. Miller, San Bernardino.

★Wash., **Seattle**—Bd. Pub. Wks. let contract installing water mains in Shilshole Ave. to Superior Constr. Co., 1642 Lane St., $27,587, using wood pipe. Noted June 14.

SEWERS

Proposed Work

N. J., **Passaic**—Bd. Comrs. plans to build sewer in Amsterdam Ave. and extend sewers in Palmer and Elliot Sts., and Union and Park Aves. C. R. Wise, city engr.

N. J., **Paterson**—Bd. Wks. plans to build sewers in East Main, Hoxsey, East 23rd and Courtland Sts. and 7th Ave. H. J. Hardes, city engr.

N. J., **South Orange**—(Official)—Village sold $35,000 bonds for sewer improvements, $19,000 for waterworks, $12,000 for streets, and $23,000 for eliminating grade crossings. F. Feneer, treas. Noted July 12.

O., **Barberton**—City had plans prepared by R. W. Pratt, engr., 708 Hippodrome Bldg., Cleveland, for constructing lateral sewer in northern section of city. About $90,500.

O., **Canton**—City election soon to vote on $290,000 bond issue for building East and West intercepting sanitary sewer. W. E. Sarver, city engr.

O., **Cleveland**—City plans to install sewers in East 123rd, East 155th, East 156th and East 140th Sts. R. Hoffman, city engr.

O., **Youngstown**—City plans to build sewers in portions of Clinton, Webb and Drummond Sts. F. M. Lillie, city engr.

Ill., **Cross Point**—(Official)—Bd. Local Improv. rejected bids for building sanitary sewerage system. J. S. Braun, clk. Noted May 3.

Ia., **Dubuque** — City soon receives bids building sanitary sewers in Cora and Exchange Sts. J. J. Shea, city engr.

Colo., **Midvale**—City plans laying 8-in. sewers in Dist. No. 2. About $13,500.

Ariz., **Glendale**—City voted $50,000 bonds to construct sewerage system. F. Holmquist, Phoenix, engr.

Wash., **Port Angeles**—See "Streets and Roads."

Wash., **Seattle**—City had plans prepared for trunk sewers and outfall in 42nd Ave., et al. About $32,626. A. H. Dimock, city engr.

Ore., **Woodburn**—State Bd. Health, Salem, approved plans of L. B. Wickersham, engr., Chamber Commerc Bldg., Portland, building sewerage system here. Bids soon. About $40,000.

Cal., **Santa Barbara**—See "Streets and Roads."

Cal., **Ventura**—City having plans prepared by Olmstead & Gillelen, engrs, 1112 Hollingsworth Bldg., Los Angeles, for sewerage system. About $15,000.

Ont., **Ojibway**—City having plans prepared building waterworks and sewerage systems, including sewage disposal and filtration plants. O. E. Fleming, utility comr.

B. C., **Vancouver**—Vancouver and Dists. Joint Sewerage & Drainage Bd. having plans prepared for sewerage system. A. D. Creer, engr.

BIDS DESIRED

N. J., **Atlantic City**—Until Aug. 9, by Bd. Freeholders, for chlorine control apparatus and 5 year contract for supply of liquid chlorine for tuberculosis hospital sewer plant. Address T. Haines.

N. J., **Newark**—(Official)—Until Aug. 9, by Bd. St. and Water Comrs. for constructing sewers in Wheeler Point Rd., Ferdon, South 20th and Miller Sts. M. R. Sherrard, ch. engr.

O., **Medina**—See "Streets and Roads."

O., **Piqua**—(Official)—Until Aug. 10, by J. F. Lucky, dir. pub. ser., for constructing Northwest storm sewer. A. Schroeder, city engr.

Ont., **Toronto**—Until Aug. 14, by T. L. Church, chn. bd. control, for extending Rosedale Creek sewer from high level pumping station to Russell Hill Rd. and Clarendon Ave. About $40,000. T. McQueen, secy. Noted July 12.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., **Brooklyn** — (Official) — L. H. Pounds, boro. pres. received low bids building sewers (a) Bay 37th and Bay 38th, (b) Montgomery St., from C. Pessacca, 803 Kent Ave., (a) 135%; (b) 120%; Murphy Bros., 215 4th Ave., (a) 159%; (b) 148%. Noted June 28.

★N. Y., **Rochester**—See "Streets and Roads."

★Pa., **Phila.** — (Official) — G. E. Datesman, dir. pub. ser., let contract constructing Northeast sewage treatment works to Phila. Subway Constr. Co., 712 Lincoln Bldg., $1,025,000. Noted July 12.

Ia., **Davenport**—(Official)—City received low bids, June 17, installing sewers using single and double block in (a) Howell St., (b) Cedar St., (c) McManus Creek sewer, (d) Kirkwood Blvd., (e) Rock Island St., as follows: Independent Constr. Co., 304 Lane Bldg., (b) $17.691 single block, $17,-479 double block, (c) $20,105 and $19,510, (d) $27,762 and $26,738, (e) $77,133 and $74,318; D. E. Keeler Co., foot Marquette St., (a) $2208 and $2347, (b) $17,282, (c) $19,135, (d) $28,433 and $28.973, (e) $74,-149 and $71,563; McCarthy Improv. Co., 220 Main St., (a) $2232, (b) $17,700, (c) $19,-314, (d) $27,981 and $28,651, (e) $78,378 and $76,150. Noted July 12.

★Kan., **Manhattan**—City let contract installing storm sewer on Bertrand Ave. to Central Bridge Co., $11,691. Noted June 7.

★Wash., **Seattle**—City let contract building sewers in West and North 45th Sts., to Fiorito Bros., 1630 25th Ave., S., $18,115. Noted July 26.

Ore., **Portland**—City received low bids building sewrs in Powell Valley Rd. Dist., from J. F. Shea, 6 North 2nd St., $23,531; Jacobsen-Jensen Co., 407 Stanton St., $25,-486; J. Keating, Portland, $25,810.

BRIDGES

Proposed Work

S. C., **Charleston** — See "Streets and Roads."

Ky., **Paducah**—McCracken Co. plans to build several rein.-con. bridges. About $40,-000. R. H. Young, co. engr.

O., **Dayton**—Montgomery Co. to sell $15,-000 bonds Aug. 6 to build and repair bridges. W. H. Aszling, clk.

Ind., **Warsaw**—Kosciusko Co. plans to build viaduct under Pennsylvania R.R. About $28,000. Railroad to pay $21,000 toward cost.

Mont., **Virginia City** — (Official)—State Highway Comn. rejected bids for 1 130-ft. span combination highway bridge over Saline Spring Creek and 1 65-ft. combination highway bridge over Odell Creek, Madison Co. as too high. C. C. Adams, co. engr. Noted July 12.

Mo., **Linn**—City voted $20,000 bonds to build bridge over Osage River.

Okla., **Wetumka** — Town voted $34,000 bonds to build bridges and roads.

Wash., **Seattle** — Council appropriated $17,000 to build approaches to 15th Ave northwest bridge from Nickerson St. side. A. H. Dimock, city engr.

Cal., **Fresno**—Fresno and Madero Cos. plans to rebuild Lane Bridge. About $19,-062. Address Co Clk., Fresno.

BIDS DESIRED

N. J., **Camden**—Until Aug. 6, by Bd Freeholders for 3-span rein.-con. bridge over Newton Creek, 219 ft. long, 50 ft. wide. J. J. Albertson, Magnolia, co. engr.

N. J., **Newark**—Until Aug. 27, by Bd Freeholders Essex Co., for rein.-con. I-beam bridge over Peckman River, Little Falls Rd., also cross-drains and catch-basins. F. A. Reimer, co. engr.

N. J., **Salem**—Until Aug. 16, by Bd. Freeholders, Salem Co., building rein.-con. highway bridge and spillway at Avis Mills. H. P. Gray, dir.

Va., **Grundy**—(Official)—Until Aug. 6, by Comrs. Buchanan Co., for 246-ft. steel bridge over Dismal River, fill approaches.

Bridges (Continued)

Ga., Elberton—(Official)—Until Aug. 27, by Elbert and Madison Co. Comrs., Elberton building Towus lattice highway bridge over Broad River, 300 ft. long, 16 ft. wide, 3 split rock piers. J. McIntosh and G. O. Griffith, comrs.

Ky., Hartford—(Official)—Until Aug. 9, by F. M. Kaisersatt, aud. Ohio Co., building steel bridge over public ditch near Reynolds, involving 208 cu.yd. concrete, 31,800 lb. structural steel for 16-ft. roadway, 25,000 lb. 12-ft. roadway, 4900 lb. lumber 16 ft. roadway, 3740 lb. 12-ft. roadway. C. D. Snead, engr.

Ky., La Grange—(Official)—Until Aug. 10, by Oldham Co., building 3 concrete bridges on La Grange and Shelbyville Rd., involving 350 cu.yd. concrete all classes, and 10,304 lb. steel. R. Wiley, comr.

O., Canton—(Official)—Until Aug. 6, by Stark Co. Comrs., for repairing Tuscarawas River Bridge, Navarre-Justus Rd., involving 27,739 lb. new steel joists, 80 pieces new joist clips, etc. W. C. Schick, clk.

O., Troy—(Official)—Until Aug. 22, by Miami Co. Comrs. for removing Bridge No. 20 on I. C. H. No. 208 over Stillwater River at Covington, also building new structure. C. N. Peters, co. aud. Noted July 26.

Ind., Elkhart—Until Aug. 6, by Comrs. Elkhart Co., Goshen, for bridge over St. Joseph River on Elkhart Ave. County to appropriate $63,800 toward cost, Indiana & Michigan Electric Co., $18,400. C. L. Kinney, co. engr. Noted June 21.

Ill., Kankakee—Until Aug. 30, (readvertised) by Comrs. Kankakee and Will Cos., Court House, Kankakee, for rein.-con. arch bridge over Kankakee River between 2 counties; 7 spans 70-ft. long and 2 spans 68 ft. long with 20-ft. roadway. Cost bridge proper, $43,000; culvert approach, grades, spandrel fill and wearing surface, $7150. Noted June 28.

Minn., Waseca—(Official)—Until Aug. 6, by Waseca Co. Comrs., building 1 40-ft. girder span concrete bridge, 1 16-ft. slab span concrete bridge, 1 6 x 8 x 40-ft. rein.-con. culvert, concrete backing, wing walls for I-B bridge. T. Peterson, co. aud.

Neb., Tehamah — (Official)—Until Aug. 14 (readvertised) by M. S. McGrew, city clk., for rein.-con. highway bridge, 2 34-ft deck girder type spans and 150-ft. retaining walls. About $12,000. A. C. Arend, Brandies Bldg., Omaha, engr. Noted July 19.

Cal., Fairfield—Until Aug. 6 by Bd. Superv. Solano Co. for constructing bascule bridge over Sacramento River.

Cal., San Jose—(Official)—Until Aug. 6, by Bd. Superv. Santa Clara Co., building rein.-con. bridge over Llagas Creek on Church Ave., Superv. Dist. No. 1.

Cal., Somis—Until Aug. 14, by Bd. Supervs. Ventura Co., Ventura, for Center St. bridge, 4 mi. east of Somis, involving 94 cu.yd. concrete in abutments, 6 cu.yd. concrete in pavement slab, 7640 lb. reinforcing steel. J. B. McCloskey, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—(Official)—Boro. received low bid constructing Park Ave. viaduct from 40th St. to Grand Central Sta., from Terry & Tench, Grand Central Terminal, $57,020; Snare & Triest Co., Woolworth Bldg., $575,500; P. T. Cox Contr. Co., 7 Nassau St., $589,224.

★Pa., Birdsboro—Philadelphia & Reading R.R. let contract 5-span rein.-con. Bridge No. 85 to Bennett & Randall, Reading.

★Ala., Birmingham—(Official)—Bd. Revenue of Jefferson Co. let contract steel bridge over Warrior River to Southern Bridge Co., 39th St., 8c. per lb. Noted June 28.

O., Barberton—T. J. Davies, dir. pub. ser., received low bids for concrete and steel viaduct known as Tuscarawas Ave. Viaduct from E. J. Lauders, Canton and Hackendorn Constr. Co., 1134-6 Ind.-Pythian Bldg., Indianapolis, $183,980. Both bids were above amount appropriated for work. Noted June 28.

O., Miamisburg—W. H. Aszling, co. clk., Dayton, received low bids for steel superstructure for bridge No. 248 over Great Miami River, from Brookville Bridge Co., $114,700; Central States Constr. Co., 606 Beecher St., Indianapolis, $115,500; Illinois Bridge Co., 53 West Jackson Blvd., Chicago, $117,000. Noted July 5.

★O., Youngstown — (Official) — Youngstown Sheet and Tube Co., Stambaugh Bldg., let contract rebuilding bridge recently destroyed by tornado, 100 ft. high, 327 ft. long to Heyl & Patterson. Noted July 19.

★Okla., Buffalo—See "Railways."

★Mich., Cassapolis—Cass Co. let contract 18 bridges on Dowagiac River Drain to Reach Mfg. Co., Charlotte, $66,500.

★Ill., Danville—(Official)—Vermilion Co. let contract rein.-con. arch bridge, Sect. 6, Georgetown Twp. to Porter-McCully Constr. Co., Mackinaw, $19,500. Noted July 26.

★Okla., Tulsa—Tulsa Co. let contract Sand Springs Bridge to Canton Bridge Co., Weder Ave., Canton, $17,000.

Wash., Bellingham — Whatcom Co. Comrs., Marietta, received low bids for rein.-con. pier bridge from Worel & Co., Bellingham, $49,020; Illinois Bridge Co., Seattle, $54,220; Croxson & Kirk, Portland, $56,702.

Cal., Nicolaus—Sutter Co. Supervs., Yuba City, received low bids bridge over Feather River from W. C. Duncan Constr. Co., Sharon Bldg., San Francisco, $118,516; C. E. Cotton Co., $146,730; Clinton Constr. Co., 140 Townsend St., San Francisco, $148,880.

STRUCTURAL STEEL WORK

BIDS DESIRED

Va., Grundy—See "Bridges."

O., Canton—See "Bridges."

Cal., Fairfield—See "Bridges.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ala., Birmingham—See "Bridges."

O., Dayton—See "Bridges."

O., Miamisburg—See "Bridges."

REINFORCED CONCRETE

Proposed Work

Ky., Paducah—See "Bridges."

Cal., Santa Ana—See "Miscellaneous."

Cal., Santa Barbara—See "Waterworks."

BIDS DESIRED

N. J., Camden—See "Bridges."

N. J., Newark—See "Bridges."

N. J., Salem—See "Bridges."

Ky., Hartford—See "Bridges."

Ky., La Grange—See "Bridges.",

Ill., Kankakee—See "Bridges."

Neb., Tehamah—See "Bridges."

Cal., San Jose—See "Bridges."

Cal., Somis—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., New Brunswick—See "Miscellaneous."

★Pa., Birdsboro—See "Bridges."

★Pa., Phila.—See "Industrial Works."

★Fla., Panama City—See "Streets and Roads."

O., Barberton—See "Bridges."

★O., Cleveland—See "Industrial Works."

★Ind., Indianapolis — See "Industrial Works."

★Ill., Danville—See "Bridges."

★Ia., Waverly—See "Waterworks."

★Kan., Junction City — See "Waterworks."

★Ariz., Winslow—See "Waterworks."

Wash., Bellingham—See "Bridges."

STREETS AND ROADS

Proposed Work

Massachusetts—(Official) — State Highway Comn., Boston, rejected bids building 14,600 ft. state highway, Egremont-West Boylston Twps. Noted July 19.

N. Y., Eastwood — (Official) — City rejected bids grading and macadamizing portion Blust St. L. B. Smith, clk. Noted July 19.

Pa., McKeesport — Council passed ordinance to improve portions Patterson, Garbett and Oakland Aves., and Craig and De Long Sts. J. M. Smith, city engr.

Delaware—(Official) — State Highway Comn., Dover, made surveys for proposed highway from Newark, Del., to Elkton, Md., 2.6 mi. in New Castle Co. Bids will be received about Aug. 30. County will bear cost of work. C. M. Upham, ch. engr. state highway dept.

Va., Newport News—City plans $100,000 bond issue for improving streets. Address the Mayor.

W. Va., Parkersburg—Wood Co. Court plans to pave 2 mi. of River Rd., about 2000 mi., between this city and Williamstown.

S. C., Charleston — Charleston Co. will vote Aug. 29 on $275,000 for improving roads and bridges.

Ga., Atlanta—City plans to repave portion North Ave. County to appropriate $15,000 toward cost. H. M. Hunt, city engr.

Fla., Key West—Monroe Co. election Aug. 14 to vote on $100,000 bonds to build hard surfaced road from Key West to Stock Island.

Fla., Milligan—Okaloosa Co. voted $50,000 bond issue for grading and hard-surfacing portions of road in special road and bridge district.

Miss., Magnolia—Pike Co. Comrs. sold $10,000 bonds to build good roads.

Miss., Weathersby—Simpson Co. Comrs. sold $60,000 bonds to construct Central Highway. Address Co. Clk., Mendenhall.

La., Kenner—Town Council plans $25,000 bond issue for improving streets. Address the Mayor.

La., Lake Providence—Carroll Co. sold $100,000 bonds to build lateral roads and highway to Oak Grove, West Carroll Co. Noted May 10.

Tenn., Chattanooga—Hamilton Co. Highway Comrs. plans to build Manufacturers Rd., to be an extension of Frazier Ave. About $10,000.

Tenn., Clarksville — Montgomery Co. Comrs. voted $50,000 bond issue for building roads.

O., Bryan—Williams Co. to sell $21,000 bonds Aug. 3 to improve portion I. C. H. No. 306. G. C. Boucler, aud.

Ill., Belleville—Bd. Superv. St. Clair Co., sold $400,000 bonds to improve streets. Noted July 5.

O., Cincinnati—City Council plans resurfacing Larch Ave., bituminous macadam, paving Jones St., asphalt or bitulithic and Verdin Ave., brick. F. Krug, city engr.

O., Cincinnati—C. F. Hornberger, dir. pub. wks., soon lets contract repaving Lincoln Ave., with wood block; about $37,000; also improving Dayton St. with either granite and bitulithic or all granite; about $24,150 and $29,455 respectively.

O., Cleveland—City plans paving portions of East 123rd, East 128th, East 158th, East 160th, East 117th, East 157th, Korman, Olive and McElhatten Streets. R. Hoffman, city engr.

O., Warren—Trumbull Co. Comrs. sold $113,250 bonds to improve roads. W. Fahr, clk. Noted June 14.

Ind., South Bend—Bd. Wks. had new plans prepared for paving Mishawaka Ave. and Eddy St., about $199,800; also paving portion Dubail Ave., $44,000; F. J. Anderson, city engr.

Ill., Chicago—City plans extending Ogden Ave. from Union to Lincoln Park; also improving Robey St., Ashland and Western Aves. J. Ericson, city engr.

Ill., Galesburg—City plans to build 133,000 sq.ft. sidewalk on North Seminary St., cement. About $25,376. F. M. Connolly, city engr.

Ill., Hillsboro—City plans paving Hamilton, Brailey and Water Sts. and Springfield Rd.

Ia., Des Moines—City passed resolution to widen and grade portion North Union St., 50 ft. K. Kastberg, city engr.

Minn., Duluth—St. Louis Co. voted $20,000 bond issue to improve roads. O. Halden, aud.

Kan., Beloit—City plans paving portion of Mill St. C. R. Herrick, clk.

Kan., Wichita—City plans paving portion James St. B. Wells, city engr.

Neb., Lincoln—Comrs. Paving Dist. No. 18, Lancaster Co., plan to build highway joining Lincoln and University Pl., brick.

Neb., Lincoln—City plans paving portion L St. A. Dobson, city engr.

Mo., Independence—Jackson Co. plans to build roads. About $70,000. Federal Government to appropriate $35,000 toward cost.

Mo., New Madrid—New Madrid Co. election Aug. 3 to vote on $800,000 bonds to build highways. Noted July 5.

Mo., Sedalia—City passed ordinance for paving and building sidewalks, portions of Quincy Ave., also curbing East 5th St. F. T. Leaming, city engr.

Arkansas — E. H. McGill, engr. State Highway Dept., Little Rock, had plans prepared building road from Melbourne to Mt. Olive, a link in Hot Springs-Mammoth Spring State Highway.

Ark., Berryville—Carroll Co. Comrs. voted $75,000 bond issue for improving roads.

Tex., Cameron.— State Atty. General's Dept., Austin, approved $20,000 bond issue to build good roads in Milam Co., Rd. Dist. No. 7 and $15,000 bond issue for same purpose in Rd. Dist. No. 12.

Streets and Roads (Continued)

Tex., Center—(Official)—Shelby Co. election Sept. 1 to vote on $600,000 bond issue to build roads. R. H. McCauley, clk. Noted July 19.

Tex., Lavaca—County election Aug. 14 to vote on $75,000 bond issue to improve roads in Dist. No. 2.

Tex., Victoria—City soon lets contract paving various streets. About $300,000. A. Block, city engr.

Okla., Buffalo—Harper Co., Good Twp., voted $13,500 bond issue for building roads.

Okla., Fallis—(Official)—Lincoln Co. sold $16,000 bonds to build roads. Address Co. Clk., Chandler. Noted July 19.

Washington—State Highway Comn., Seattle, soon lets contract constructing about 18 mi. Central Washington Highway in Franklin Co., to cost $60,000. County will gravel and surface road next year, $30,000.

Wash., Ellensburg—City plans concrete walks portion 2nd, 4th, 7th, Sprague and Ruby Sts. About $12,000.

Wash., Everett—Snohomish Co. Comrs. rejected bids hardsurfacing Bond Issue Propositions Nos. 26 and 29. New bids. W. C. Bickford, co. engr. Noted July 5.

Wash., Port Angles—Council passed ordinance to pave, grade, and build sewers, ditches and culverts on several streets. About $20,000.

Wash., Port Orchard—Kitsap Co. Comrs. rejected bids building and improving Permanent Highway No. 1-C. New bids. F. D. Gore, co. engr Noted July 5.

Wash., Seattle—City had plans prepared planking, etc., on Northlake Ave., about $84,873; paving portions 24th Ave. N. and East Montlake Pl., $10,000, Beacon Ave., $70,000. A. H. Dimock, city engr.

Wash., South Bend—Pacific Co. Comrs. to sell $275,000 bonds Aug. 7 to build highway, E. E. Decker, co. treas.

Oregon—State Highway Comn. soon lets contract paving 10 mi. road between Monroe and Junction City, in Benton and Lane Cos.

Oregon—State Highway Comn. plans grading and paving portions Lower Columbia River Highway. About $435,000.

Ore., Condon—Gilliam Co. soon receives bids macadamizing portion Canyon Rd. About $15,000.

Cal., Eureka—City plans paving B'way., concrete base and asphalt surface. About $50,000. G. A. Strand, city engr.

Cal., Glendora—City sold $10,000 bonds to improve streets.

Cal., Oceanside—City election soon to vote on bonds to pave Hill St., from north to south boundaries of city, concrete.

Cal., Santa Barbara—City soon lets contract paving San Andreas, Canon, Perdio, and Marilla Sts., 4-in. concrete, 2-in. asphalt surface, concrete curbs and gutters; also vitr. pipe sewers. A. B. Cook, city engr.

BIDS DESIRED

N. Y., Buffalo—Until Aug. 7, by A. C. Hinkley, clk. bd. supvrs. Erie Co., for Co. Rd. No. 22, Glenwood-East Concord Part 1.

N. Y., New York—Until Aug. 8, by M. M. Marks, boro. pres., Municipal Bldg., furnishing and delivering 1000 tons limestone dust, 350,000 gal. refined asphalt 15,000 cu. yd. asphaltic wearing surface.

N. Y., New York—Until Aug. 8, by M. M. Marks, boro. pres., Municipal Bldg., regulating, repaving with sheet asphalt, portion roadways Pine, West 162nd St. and Broadway.

N. Y., New York—Until Aug. 9, by Park Bd., Dept. Parks, Municipal Bldg., repaving cement walks, Battery Pk., paving and repaving walks of Central and other parks, asphalt mastic. C. Ward, pres.

N. Y., S. I., St. George—Until Aug. 6 by C. D. Van Name, boro. pres., Boro. Hall, regulating and repaving with bituminous concrete portion roadway Wright Ave.

N. Y., S. I., St. George—Until Aug. 7 by C. D. Van Name, boro. pres., Boro. Hall, St. George, furnishing and delivering 650 cu.yd. 1- to 2-in. broken stone, 300 cu.yd. screenings of trap rock, Dist. No. 1; 900 cu.yd. 1- to 2-in. broken stone, 450 cu.yd. screenings of trap rock, Dist. No. ; 1040 cu.yd. 1- to 2-in. broken stone, 100 cu. yd. screenings trap rock, Dist. No. 3.

N. J., Atlantic City—Until Aug. 8, by Bd. Freeholders Atlantic Co., for furnishing 190,000 gals. lignin binder known as glutrin for Absecon, Hammonton, Egg Harbor City, Mays Landing and Pleasantville. A. H. Nelson, co. engr.

N. J., Elizabeth—Until Aug. 9, by Bd. Pub. Wks., paving Monroe Ave., sheet asphalt, 6-in. concrete foundation. O. E. Collins, city engr.

N. J., Freehold—Until Aug. 14, by E. C. White, chn. twp. com. for improving 6790 sq.yd. Hamilton-Glendola Rd. with gravel surface.

N. J., Mountainside—(Westfield P. O.)—Until Aug. 8, by Bd. Freholders Union Co., repairing Mountain Ave., 5000 lin.ft. stone and tarvia. J. L. Bauer, co. engr.

N. J., Newark—(Official)—Until Aug. 27 (change of date) by Bd. Freeholders Essex Co., improving Little Falls Rd., bituminous concrete, Type A, Cedar Grove Twp., also constructing concrete I-beam bridge over Peckham River, Little Falls Rd. F. A. Reimer, co. engr. Noted June 28.

N. J., Stone Harbor—Until Aug. 21, by Cape May Co. Comrs., Cape May for constructing stone road through here. L. M. Rice, Wildwood, co. engr.

Md., Rockville—(Official)—Until Aug. 7 by Comrs. Montgomery Co., for State aid highway; advertised in this issue. Noted June 28.

Va., Portsmouth—Until Aug. 9 by Comrs. Norfolk Co., for building new Jamestown Blvd. with bituminous macadam on concrete base.

Ga., West Point—Until Aug. 7 by City paving, grading, curbing, draining, building sidewalks various streets, concrete, brick or asphalt. About $60,000. L. Strong clk. Noted July 5.

Fla., Tampa—Until Aug. 14, by Comrs., Hildsborough Co. for building hard surfaced road in Wimauma Spl. Rd. & Bridge Dist. W. P. Culvreath, clk. Noted May 17.

Miss., Friar Point—Until Aug. 7, by Bd. Aldermen, for building 120,000 sq.ft. concrete sidewalks. M. Y. Scott, city clk.

Miss., Indianola—Until Aug. 17 by J. E. Johnson, chancery clk., for 25-mi. gravel road in Sunflower Co.

Louisiana—Until Aug. 6, by Highway Dept., Bd. State Engrs., New Orleans Court Bldg., New Orleans, for building 33-mi. gravel road in Road Dist. No. 1, Coupee Parish. F. M. Kerr, ch. engr.

Tenn., Savannah—Until Aug. 16, by J. E. Holland, chn. highway comn., for building 40 mi. gravel road in Hardin Co. F. M. Patton, Savannah, engr.

Ky., Hazards—Until Aug. 16, by city improving various streets. About $30,000.

Ky., Jenkins—Until Aug. 17, by City improving streets. About $20,000. L. B. Abbott, engr.

Ky., Owensboro—Until Aug. 6, by Fiscal Court of Daviess Co., for improving Henderson Rd., involving 11,888 cu.ft. excav., 57 cu.yd. concrete, 2318 tons broken stone, or 1756 cu.yd. river gravel.

Ky., Owensboro—Until Aug. 6, by Fiscal Court. Daviess Co., for improving 3.54 mi. Hardinsburg Rd. involving 33,620 cu.yd. excava. and 32.3 cu.yd. concrete. J. Weir, co. clk. Noted July 26.

Ky., Whitley City—Until Aug. 11, by City and McCreary Co. for improving streets. About $10,000.

Ohio—Until Aug. 15, by State Highway Comn., Columbus, building roads as follows: Ashtabula Co., Sect. "C," Youngstown-Conneaut Rd., I. C. H. 13, grading roadway, building bridges and culverts and paving with either monolithic brick or concrete, 5 mi., about $114,656; Auglaize Co., Sect. "A-1," Wapakoneta-St. Marys Rd., I. C. H. 165, brick, rein.-con., Warrenite or waterbound macadam, 1.79 mi., $33,953; Clark Co., Sect. "A-1" Springfield-Jamestown Rd., I. C. H. 472, grading roadway, building bridges and culverts and paving with bituminous macadam, 1.54 mi., $32,145; Coshocton Co., Sect. "A," Mt. Vernon-Coshocton Rd., I. C. H., 339, bituminous macadam or waterbound gravel, 3.60 mi., $47,993; Crawford Co., Sect. "J," Columbus-Sandusky Rd., I. C. H. 4, brick, 1.02 mi., $29.957; Sect. "G," Bucyrus-Upper Sandusky Rd., I. C. H., 200, 1.31 mi., $39,141; Cuyahoga Co., Sect. "A," Chagrin Falls-Cuyahoga Falls Rd., I. C. H., 91, either brick or monolithic brick, 2.73 mi., $90,356; Fairfield Co., Sect. "A-1," Baltimore-Reynoldsburg Rd., I. C. H., 461, waterbound macadam, 2.25 mi., $31,241; Sect. "M-2," Cincinnati-Zanesville Rd., I. C. H., 10, waterbound macadam, 3.22 mi., $45,003; Guernsey Co., Sect. "L," Cambridge-Caldwell Rd., I. C. H., 353, bituminous macadam, 1.25 mi., $17.978; Harrison Co., Sect. "P," Steubenville-Cambridge Rd., I. C. H., 26, waterbound macadam, 1.60 mi., $19,346; Holmes Co., Sect. "A," Navaree-Berlin Rd., I. C. H., 79, grading only, 2.69 mi., $14,633; Knox Co., Sect. "A," Mt. Vernon-Mt. Gilead Rd., I. C. H., 333, rein.-con., 2.22 mi., $57,385; Lake Co., Sect. "B," Euclid-Chardon Rd., I. C. H., 34, rein.-con. 2.25 mi., $36,163; Mahoning Co., Sect. "U-1," Akron-Canfield Rd., I. C. H., 87, waterbound macadam, 1.13 mi., $13,500; Sect. "A-1," Niles-Canfield Rd., I. C. H., 328, waterbound macadam, 1.20 mi., $14,131; Sect. "Y," Canfield-Poland Rd., I. C. H., 486, waterbound macadam, 1.88 mi., $22,-124; Sect. "U," Youngstown-Lowellville Rd., I. C. H., 14, brick 1.50 mi., $48,280; Medina Co., Sect. "A-2," Elyria-Medina Rd., I. C. H., 314, concrete, 0.97 mi., $13,251; Morgan Co., Sect. "H," McConnellsville-Athens Rd., I. C. H., 162, waterbound macadam, 2.34 mi., $46,555; Muskingum Co., Sect. "M-1," Zanesville-Dresden Rd., I. C. H., 344, concrete, bituminous macadam or non-bituminous macadam, 0.99 mi., $16,690; Putnam Co., Sect. "H," Kalida-Lima Rd., I. C. H., 134, grading only, $6695; Sandusky Co., Sect. "O," Fremont-Castalia Rd., I. C. H., 281, brick, 1.30 mi., $35,719; Scioto Co., Sect. "A-1," Portsmouth-Lucasville Rd., I. C. H., 406, brick or monolithic brick, or bituminous macadam, 3.01 mi., $79,012; Stark Co., on Section "B-2," Canton-New Franklin Rd., I. C. H. 72, brick, 1.17 mi., $44,483; Warren Co., Sect. "B," Dayton-Lebanon Rd., I. C. H. 64, waterbound macadam, 2.65 mi., $19,940.

Ohio—Until Aug. 16, by State Highway Comn., Columbus, building roads as follows: Athens Co., Sect. "A," Athens-Hockingport Rd., I. C. H. 156, grading roadway, building bridges and culverts and paving with brick, 1.34 mi., about $32,840; Butler Co., Sect. "I," Hamilton-Middleton Rd., I. C. H., 179, rein.-con. and monolithic brick, 3.18 mi., $76,914; Butler Co., Sect. "J," Hamilton-Middletown Rd., I. C. H. 179, rein.-con. and monolithic brick, 3.54 mi., $81,-814; Clermont Co., Sect. "I," Ohio River Rd., I. C. H., 7, bituminous macadam, 4.12 mi., $27,654; Erie Co., Sect. "P," Sandusky-Norwalk Rd., I. C. H., 294, concrete or brick, 0.46 mi., $24,652; Erie Co., Sect. "O," Sandusky-Clyde Rd., I. C. H., 276, rein.-con. 1.53 mi., $30,943; Franklin Co., Sect. "Q," Columbus-Sandusky Rd., I. C. H., 4, bituminous macadam, 1.96 mi., $38,987; Fayette Co., Sect. "M," Hillsboro-Washington Rd., I. C. H., 259, waterbound macadam, 2.29 mi., $23,065; Fulton Co., Sect. "K-1," Archbold-Fayette Rd., I. C. H., 301, waterbound macadam, 1 mi., $13,729; Gallia Co., Sect. "F-1," Gallipolis-Jackson Rd., I. C. H., 399, bituminous or waterbound macadam, 1.65 mi., $18,317; Gallia Co., Sect. "A-1," Ohio River Rd., I. C. H., 7, waterbound gravel or concrete and gravel, 1.69 mi., $18,424; Sect. "E-1," Gallipolis-Ironton Rd., I. C. H., 405, waterbound macadam, 1.70 mi., $21,-700; Geauga Co., Sect. "K," Cleveland-Meadville Rd., I. C. H., 15, concrete, 2.80 mi., $37,693; Sect. "B," Hampden-Andover Rd., I. C. H., 475, rein.-con., 2.63 mi., $33,-316; Hardin Co., Sect. "A," Kenton-Upper Sandusky Rd., I. C. H., 229, rein.-con., bituminous macadam or bituminous concrete, 1.35 mi., $35,701; Hocking Co., Sect. "J," Logan-Chillicothe Rd., I. C. H., 363, waterbound gravel, 1.89 mi., $27,537; Huron Co., Sect. "A," Savannah-Vermillion Rd., I. C. H. 149, concrete or monolithic brick, 2.12 mi., $25,401; Knox Co., Sect. "K," Columbus-Wooster Rd., I. C. H., 24, rein.-con. 1.61 mi., $46,389; Lawrence Co., Sect. "K," Ohio River Rd., I. C. H., 7, concrete or bituminous macadam, 0.97 mi., $20,026; Sect. "E," Ironton-Miller Rd., I. C. H., 404, bituminous macadam, 1 mi., $16,152; Licking Co., Sect. "E," Newark-Fallsburg Rd., I. C. H., 479, waterbound macadam, 1.45 mi. $33,167; Lorain Co., Sect. "I," Ashland-Oberlin Rd., I. C. H., 144, concrete or bituminous macadam, 1.71 mi., $26,840; Mahoning Co., Sect. "R-1," Akron-Youngstown Rd., I. C. H., 18, waterbound macadam, 0.98 mi., $11,228; Sect. "P," Akron-Youngstown Rd., I. C. H. 18, brick, 1.11 mi., $23,-464; Ottawa Co., Sect. "G," Port-Clinton-Marblehead Rd., I. C. H., 440, brick, 1 mi., $38,008; Portage Co., Sect. "V," Akron-Youngstown Rd., I. C. H., 18, concrete, bituminous macadam and monolithic brick, 2.59 mi., $57,838; Putnam Co., Sect. "G," Kalida-Lima Rd., I. C. H., 134, waterbound macadam, 1.42 mi., $11,049; Ross Co., Sect. "N-n," Chillicothe-Lancaster Rd., I. C. H., 361, semi-monolithic brick, 1.34 mi., $41,494; Stark Co., Sect. "G," Ravenna-Louisville Rd., I. C. H., 74, bituminous macadam, 2.52 mi., $54,571; Trumbull Co., Sect. "C," Warren-Meadville Rd., I. C. H. 330, bituminous macadam, 3.38 mi., $32,354; Sect. "A-1," Canfield-Niles Rd., I. C. H. 328, brick, 0.73 mi., $29,689; Vinton Co., Sect. "A," Gallipolis-McArthur Rd., I. C. H. 398, $4911; Williams Co., Sect. "L," Bryan-Pioneer Rd., I. C. H. 306, waterbound or bituminous macadam, 3.81 mi., $69,260; Wyandot Co., Sect. "A-2," Upper Sandusky-Kenton Rd., I. C. H. 229, brick, 0.24 mi., $7697; Sect. "A," Upper Sandusky-Tiffin Rd., I. C. H. 266, brick, 0.96 mi., $29,897.

O., Canton—Until Aug. 8, by Bd. Comrs. Stark Co., for improving 8th St. N. E., involving 10,145 cu.yd. sub-grade excava., 3200 sq.yd. vitr. block paving, 2500 lin.ft. stone curb, 170 lin.ft. circle stone curb and 165 lin.ft. stone or concrete pavement headers.

Streets and Roads (Continued)

O., Cincinnati—(Official)—Until Aug. 13. E. Von Bargen, purch. agt., City Hall, for furnishing about 30,000 gal. coal tar bituminous road surfacing material to treat both waterbound and bituminous asphalt and bitulithic streets; also for 40,000 gal. paving pitch to use as filler in brick and granite pavement F Krug, city engr.

O., Cincinnati—Until Aug. 17, by A. Reinhardt, clk. bd. comrs. for improving Plainsville Rd. from Wooster Pike to corporation limits of Cincinnati; also parts of Livingston Rd.. Hamilton Co.

O., Coshocton—Until Aug. 9, by S. Ashman, serv. dir., for paving 18,000 sq.yd. on Sycamore and 3rd Sts., brick

O., Dayton—Until Aug. 6, by Dept. Pub. Ser., for paving portions Leo, Pitts and Foundry Sts F. O Eichelberger, city engr.

O., Medina—Until Aug. 15 by W. P. Ainsworth, city clk., paving and grading Prospect, South B'way, Smith Rd. and North Court St., vitr. brick, concrete base; also setting curbs, building storm sewers, culverts, drains and retaining walls.

O., Pioneer—(Official)—Until Aug. 15, by W. W. Coulon, village clk., for paving various streets, about 13,000 sq.yd. surface. L. A. Boulay Co., 1248-51 Nicholas Bldg., Toledo, engrs.

O., Sandusky—(Official)—Until Aug. 13 by City Comrs., for paving portions of Adams, Fulton, Division and Boult Sts. and Maple Ave. F. Johnston, city engr. Noted July 26.

O., Westerville—Until Aug. 11, by R. S. Bennett, village clk., for curbing, paving, grading, draining and laying water and sewer laterals on various streets; also paving and curbing Park St.

Ind., Wabash—(Official)—Until Aug. 7, by F. Kircher, co. aud., grading Hains Rd. No. 1 and 2. About $10,000. Noted July 12.

Ia., Burlington—(Official)—Until Aug. 5, by A. F. Felker, aud. Des Moines Co., for grading about 15,000 cu.yd. Bottom Rd., and Mile 2, Wapello Rd. M. L. Hutton, co. engr.

Ia., Council Bluffs—Until Aug. 6, by E. V. Gustafson, city clk., for paving portion of Military Ave., 16-in. concrete. Noted June 7.

Neb., Grand Island—Until Aug. 7, by City, for paving Walnut, 10th St. and other streets, vertical fiber brick, sheet asphalt, etc. About $100,000. H. W. Kibley, city engr.

Neb., Plattsmouth—Until Aug. 13, by City, for 12,859 yd. paving, brick or wire cut brick, and 7442 ft. curbing in Dist. No. 13. J. F. Warga, clk.

Mo., Jefferson City—Until Aug. 6 by City Council, curbing and guttering Adams St. with cement and macadamizing with asphalt binder. P. C. Harding, city engr.

Mo., St. Louis—(Official)—Until Aug. 14, by Bd. Pub. Ser., for improving alley in City Block No. 3995 with vitr. brick, St. Charles St., treated wood-block pavement and Wilcox Ave., vitr. brick pavement and concrete curb. E. R. Kinsey, pres.

Ark., DeVall Bluff—Until Aug. 6, by W. H. Wheeler, pres. dist. comrs., for improving roads in Rd. Dist. No. 3, Prairie Co., involving 2½ mi. macadam, 4420 cu.yd. embankment, 80 cu.yd. concrete and 4066 tons crushed rock.

Idaho—Until Aug. 10, by Secy. State Highway Comn., Boise, building 17 mi. Idaho-Utah highway in Bannock Co.

Utah, Salt Lake City—Until Aug. 14, by City Rec., for paving Virginia and Alta Sts. and 3rd and 4th Aves., also grading, curbing, guttering and paving of Pavement Extension No. 137. S. Q. Cannon, city engr.

Washington—Until Aug. 20, by State Highway Bd., Olympia, for clearing, grading, draining and surfacing Sect. State Rd. No. 21 between Clifton and Charleston, Kiptsap Co.

Wash., Seattle—(Official)—Until Aug. 10, by Comrs. Park Bd., for resurfacing Blaine Blvd., 2500 lin.ft. asphaltic concrete, 1100 lin.ft. monolithic brick, 24 ft. wide. About $10,000. P. Cotterill, secy. A. H. Dimock, city engr. Noted July 19.

Wash., Walla Walla—Until Aug. 10, by Bd. Comrs. Walla Walla Co., for building Permanent Highway No. 16 and repaving and resurfacing College Ave.

Cal., Santa Ana—Until Aug. 8, by Bd. Superv. for surfacing about 142,256 sq.ft. of Grand Ave. and about 142,256 sq.ft. of Huntington Beach Rd. with Bitucrete, wearing surface. W. B. Williams, co. clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Massachusetts—State Highway Comn., Boston, received low bids building roads Egremont-Sheffield Twp. from L. C. Fay & Co., 318 Main St., Springfield, $49,442; Cordner & Montague, 433 Bay St., Springfield $54,231.

★Massachusetts—(Official)—State Highway Comn., Boston, let contract building 14,600 ft. state highway, Worcester-West Boylston Twps. to R. H. Newell Co., Uxbridge, $44,800. Noted July 19.

★Mass., Boston—City let contract paving portion Commonwealth Ave., 3-in. st. aspha, to Central Constr. Co., 288 Southampton St., Roxbury, $119,975. Noted May 3.

★Mass., Dorchester — City let contract paving portion Dorchester Ave. to J. Doherty, 133 Calumet St., Roxbury, $40,336. Noted July 26.

★R. I., Pawtucket—(Official)—City let contract paving Broad St. to E. B. Roberts Constr. Co., 2 North St., Pittsfield, Mass., $4.47 per sq.yd.

★Connecticut—J. C. Bennet, state highway comr., Hartford, let contract building highway to E. Tracy Derby, $42,000.

★Conn., New Haven—City let contract laying 5 mi. cement walks, Spring Glen Manor, and 14,000 sq.ft. granolithic walks, Tuberculosis Hospital, West New Haven, to New Haven Engineering & Constr. Co., 82 Church St.

N. Y., Albany—State Highway Comn., 55 Lancaster St., received low bids building highways in various counties as follows: Rd. No. 1405, Thompson's Lake-Van Auken Corner, Albany Co., 2.93 mi., Graylock Constr. Co., New York City, $19,934, Klein-Zwick Co., Albany, $24,411; Rd. No. 1300, Barnes Corners-West Lowville, Pt. 2, Lewis Co., 8.82 mi., Dale Engr. Co., Utica, $118,975; Rd. No. 1321, Conesus-Wayland, Livingston Co., 8.34 mi., Atlanta Constr. Co., Wayland, $131, 537, P. H. Murray, Rochester, $151,568; Rd. No. 1361, Oneida Lake-South Bay and Oneida-South Bay, Pt. 2, Madison Co., 5.65 mi., Graylock Constr. Co., New oYrk City, $49,292; Rd. No. 5280, Little Neck-Old Westbury, Pt. 2, Nassau Co., 1.57 mi., J. McAvoy, New York City, $37,504, Jos. Capek, Inc., Astoria, N. Y., $37,936, R. W. Smith Corp., New York City, $37,955; Rd. No. 5604, Utica-Poland, Pt. 1, Oneida Co., 1.05 mi., H. W. Roberts & Co., Utica, $47,765; Rd. No. 1208, East Islip-Smithtown Branch, Suffolk Co., 9.57 mi., R. W. Smith Corp., New York City, $170,951; Rd. No. 5571, White Plains-East View, Westchester Co., 4.29 mi., Leo. T. Welch, Albany, $29,278, F. G. Fowler Constr. Co., Mt. Kisco, $51,835.

★N. Y., Albany—City let contract repaving portion Delaware Ave. to P. W. Mulderry, $140,103; Northern Blvd. to M. F. Dolard, Manning Blvd., $30,047; Euclid, Lenox, Homestead Aves., Glenwood, Parkwood and other streets to R. C. Sheehan, $43,312.

N. Y., Brooklyn — (Official) — L. H. Pounds, boro. pres. received low bids regulating, curbing and paving portion of 19th Ave., asphalt, 6-in. concrete foundation from Brooklyn Alcatraz Asphalt Co., 47 Hamilton Ave., $21,381; Cranford Co., 52 9th St., $21,077.

★N. Y., Irvington — Town let contract grading, clearing, curbing and paving portions of Cummings St. and Ridgewood Ave. to J. Dorer, 646 Nye Ave. About $24,352.

N. Y., Long Island City—Park Bd., Municipal Bldg., received low bid regulating, grading and paving Washington Ave. across Jacob Riis Park, concrete, from E. F. Monahan, Manhattan Beach, Brooklyn, $28,033. Noted July 19.

N. Y., Long Islaand City—M. M. Connolly, boro. pres., received low bids regulating, recurbing and repaving with asphaltic concrete portion (a) 5th Ave., (b) Thomaston Ave., wood blocks and improved granite blocks (c) Payntar Ave., granite blocks, (d) Hamilton St., sheet asphalt, (e) Grand Ave., (f) regulating, grading, curbing, laying sidewalks, portion 51st St., from Cleveland Trinidad Paving Co., Flushing, (a) $60,907, (e) $40,102; Leonard Paving Co., 233 Bway., New York City, (b) $28,937; E. Fitzpatrick, 128 3rd Ave., Astoria, (c) $11,733, (f) $8278; Borough Asphalt Co., 1301 Metropolitan Ave., (d) $10,602, (e) $38,996; Uvalde Asphalt Paving Co., 1 Bway., New York City, (a) $61,680, (d) $10,774, (e) $35,751.

N. Y., New York—D. Mathewson, boro. pres., received low bids repaving portion (a) St. Anns Ave., sheet asphalt, redresed granite blocks (b) Stebbins Ave., sheet asphalt, concrete foundation (c) Sedgwick Ave., granite blocks, sand foundation (d) Morris Ave., bituminous concrete, cemnet concrete foundation, (e) White Plains Rd., sheet asphalt, concrete foundation, (f) East Tremont Ave., waterbound macadam, (g) Dyre Ave., from Davney Asphalt Co., 53 Vanderbilt Ave., (a) $20,212, (b) $71[illegible] (d) $12,353, (e) $12,089; Asphalt Constr. Co., Madison Ave. and 137th St., (b) $69[illegible] (d) $12,013, (e) $11,908; Leonard Paving Co., 233 Bway., (c) $74,875; Uvalde Asphalt Paving Co., 1 Bway., (d) $1[illegible]10, (e) $11,760; F. V. Smith, Lafayette Ave. and Westchester Creek, (f) $15,438, (g) $10,360.

★N. Y., Rochester—City let contract paving, building sewers and walks on Mar[illegible]old, Goodman and other streets to F. V. Br[illegible] Co., E. & B. Bldg., $75,000. Noted July 19.

★N. Y., Syracuse—Bd. Contract & Supply let contract paving Ackerman Ave., asphalt, Hillside brick, to T. Hockway Constr. Co., Bastable Blk., $34,561.

N. J., New Brunswick—City received low bids paving Stratford and Llewellyn Pl. and Powers St., concrete, from Utility Constr. Co., 46 Paterson St., $15,730; T. H. Riddle, 102 Church St., $15,990.

★N. J., Rahway—City let contract 20,000 ft. material for street improvements to Fireprof Products Co., Rahway, $1.29 per sq.ft.

★N. J., Ridgewood — City let contract 27,000 sq.yd. paving on Prospect St., West Ridgewood and Goodwin Aves., concrete or bitulithic concrete, to Standard Bitulithic Co., 50 Church St., New York City.

★Pa., Erie—City let contract paving portion 17th St., asphalt, to J. J. Doyle, Erie, $17,500.

★Pa., Johnstown—Comrs. Cambria Co., Ebensburg, let contract grading and paving 4 mi. brick road in Adams Twp., to Portage Concrete Constr. Co., Portage, $57,800 and J. L. Elder, Ebensburg, $59,000.

★Pa., McKeesport—City let contract improving Brown Ave. to F. H. Crozier, $10,698.

★Pa., McKees Rocks — Comrs. Stowe Twp., c/o Andrew & Southard, Curry Bldg., Pittsburgh, let contract paving B'way., concrete base, to Bryan & McDermott, McKees Rocks, $13,000.

★Pa., Pittsburgh—Co. Comrs. rescinded contract awarded to Pittsburgh Amiesite Co., Jenkins Bldg., for improving Lovedale Rd. and relet contract to D. McNeil Co., $70,537. Noted July 12.

★Del., Wilmington—Comrs. New Castle Co. let contract resurfacing portion Foulk Rd. to A. H. McDowell, Marshalltown.

W. Va., Kingwood—Preston Co., Portland Dist., let contract building 7.3 mi. 15-ft. roadway to C. Spindler, Kingwood. About $175,000. Noted June 7.

★N. C., Kenilworth—Town let contract building 2 mi. roads, concrete, to Asheville Paving Co., Asheville.

★Miss., Yazoo—Yazoo Co. Comrs. let contract building road, 2065 mi. vitr. brick to Southern Paving & Constr. Co., James Bldg., Chattanooga, $32,854; grading, 28 mi. to Healy Constr. Co., Meridian, $78,128.

★Louisiana—(Official)—Bd. State Engrs., New Orleans, let contract building 6-mi. Sect. 4 Arkansas Highway, Caddo Co., to J. M. Montgomery, Shreveport, $15,411. Noted July 19.

★O., Cleveland—Bd. Control let contract paving portion of East 55th St. to A. M. Pejea Paving Co., 2359 East 93rd St., $43,174. Noted June 14.

★O., Springfield—City let contract paving portion Sherman Ave. to R. J. Cavanaugh, Springfield, $11,628.

Ind., Elkhart — (Official) — City received low bids (bids July 20) paving Edwardsburg Ave., brick, from Northern Constr. Co., Elkhart, $28,500; Greenleaf St., bitulithic macadam, E. Atkins, Elkhart, $21,400.

★Mich., Escanaba — City let contract paving Harnett Ave. to Wells crossing, bitulithic, to General Contr. Co., 1254 Plymouth Bldg., Minneapolis, $10,000.

★Ill., Rock Island—City let contract paving portion 13th Ave., brick and 24th St., asphalt, to Tri-City Constr. Co., 315 Putnam Bldg., Davenport. Noted May 1.

★Ia., Davenport—Bd. Local Improv. let contract repaving portion 2nd St., bitulithic, to W. Horrabin, $25,895. Noted July 12.

★Ia., Des Moines—City let contract paving portion West Grand Ave., bitulithic, to J. Horrabin & Co., 11th and Vine Sts., $2.59 per yd.

★Minn., Albert Lea—Freeborn Co. let contract widening Jefferson Highway to B. F. Gallea, Albert Lea.

★Minn., Winona—Union Co. let contract grading road between St. Charles and Dutchman's Crossing to G. E. Smith, Winona, $13,000.

Neb., Lincoln—Comrs. Lancaster Co., received low bid paving and grading Dist. No. 16, (a) monolithic, (b) concrete, from Roberts Constr. Co., Lincoln, (a) $2.03 per ft.; (b) $1.63 per ft.; Burke-Cochran Co., Lincoln, (a) $2.06 per ft.; (b) $1.75 per ft. Noted July 5.

Streets and Roads (Continued)

★**Wyo., Caspar**—City let contract paving, grading and curbing in Dist. No. 2 to Warren Constr. Co., 14 Assn. Bldg., Portland, Ore. About $49,380. Noted July 5.

★**Ark., Pine Bluff**—Co. Comrs. Jefferson Co. Rd. Improv. Dist. No. 19 let contract building 18½ mi. gravel roads, bituminous carpet top, to W. P. McGeorge & Co., Pine Bluff. Noted June 28.

★**Ark., Pine Bluff**—(Official)—Comrs. Rd. Improv. Dist. No. 21, let contract building 5 mi. gravel road, bituminous carpet cover to W. P. McGeorge & Co., Pine Bluff. About $39,000. Noted July 12.

★**Tex., Amarillo**—City let contract paving 18 blocks, brick, vibrolithic and asphalt concrete to Vibrolithic Constr. Co., Terminal Bldg., Dallas; 12,000 sq.yd. at $1.94 per sq.yd., 60c. for guttering; 12,000 sq.yd. asphaltic concrete, to F. P. McCormick, Columbus Bldg., St. Louis, $1.90, curb and gutter, 65c.; 12,000 sq.yd. brick paving to C. E. Willmering Paving Co., Amarillo, $2.03, guttering, 65c. Noted Apr. 12.

★**Tex., Victoria**—(Official)—City let contract paving 8 streets, asphaltic concrete, bitulithic, sheet asphalt, Uvalde rock asphalt, vertical fibre brick, portland cement concrete and 2 course concrete to Uvalde Rock Asphalt Co., San Antonio, $104,521. Noted July 12.

★**Idaho, Idaho Falls**—City let contract paving 6000 sq.yd. South Ridge Ave. to J. C. Maguire, Butte, Mont., $11,640.

★**Wash., Everett**—City let contract paving portion Everett Ave. to Grant & Erving, Everett, $18,502. Noted June 28.

★**Wash., Seattle** — Comrs. King Co. let contract grading 2½ mi. Permanent Highway No. 2 to L. H. Goerig, Seattle, $45,000. Noted July 12.

★**Wash., Spokane** — (Official) — Spokane Comrs. let contract paving 2.62 mi. permanent highway to H. C. Root, Spokane, $35,825. Noted July 12.

★**Ore., Grants Pass**—Josephine Co. let contract grading 2 mi. Pacific Highway between Grants Pass and Jackson Co. line to A. Anderson, Grants Pass, $72,000.

★**Ore., Pendleton**—City let contract paving portion Webb St. to Warren Constr. Co., Journal Bldg., Portland, $16,030. Noted July 5.

California—State Highway Comn., Sacramento received low bids paving and grading 10.6 mi. betwen Seeley's ranch and point near Action, Los Angeles Co., from Tyron & Brain, 502 Merchants Trust Bldg., Los Angeles, $117,492; 8.7 mi. between Action and Palmdale, Los Angeles Co. from R. Rothwell, 2842 West 8th St., Los Angeles, $144,152. Noted June 28.

★**Cal., Fairfield**—Solano Co. let contract building concrete highway in Green Valley Dist. to Western Motor Draying Co., 373 Noe St., San Francisco, $75,832.

★**Cal., Los Angeles**—City let contract improving portion Bonnie Brea St. to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., $10,757.

★**Cal., Sacramento**—Bd. Superv. let contract furnishing 170,000 bbl. cement for county highway work to H. Cowell Lime & Cement Co., 2 Market St., San Francisco, $1.95 to $2.17 per bbl. according to delivery, after allowance has been made for return of sacks; furnishing sand, Pratt Building Material Co., Sacramento, $0.19 per ton.

Cal., San Diego—City received low bid paving 136,575 sq.ft. Sierra Vista St., asphalt, 4-in. concrete base from T. C. Breitenstein, 465 Van Wyck St., Pasadena, $15,364.

★**Cal., Stockton**—City let contract paving streets in South Stockton to Clark & Henery Constr. Co., Ochsner Bldg., San Francisco, $250,000 and Paul & Cauldwell Constr. Co. $180,000.

★**Cal., Stockton**—City let contract paving several streets in Villa addition to Federal Constr. Co., Sharon Bldg., San Francisco, $44,181.

★**Que., Marieville**—City let contract constructing cement walks to A. Codere, St. Eusebe, $10,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Virginia—Kentucky & Virginia R.R., branch of Louisville & Nashville R.R., making surveys line from Wise to Pound River Sect. J. L. Smith, ch. engr. constr.

Kansas—Union Pacific R.R. plans 20-mi. double tracking from Manhattan to Junction City. About $1,000,000. R. L. Huntley, 15th and Dodge St., Omaha, ch. engr.

Washington—Oregon Washington R.R. & Navigation Co. plans 4 mi. extension to North River Valley Line. S. Murray, Portland, ch. engr.

California—California Eastern & Northern R.R., incorporated with $150,000 capital stock by W. H. Smallman of San Francisco, E. L. Weber, Napa, D. R. Morgan, St. Helena, plans line from Rutherford to Monticello.

California—San Diego & Southern Ry. plans to rebuild tracks from Santee to Foster washed out by 1916 floods. About $75,000. J. D. Spreckels, San Diego, Pres.

California — Southern Pacific R.R., San Francisco, and Salt Lake R.R. plan large terminal at Los Angeles. According to present plans Salt Lake tracks on east side of Los Angeles River will be abandoned and new tracks built on west side of river parallel to Southern Pacific tracks. The latter's tracks will be moved off Alameda St. nearer to river and numerous grade crossings will be eliminated. W. Hood, San Francisco, ch. engr. Southern Pacific R.R.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Alabama**—Muscle Shoals Traction Co. let contract 64 mi. interurban railway from Florence to Huntsville and 12 mi. branch line to Lexington to Central Constr. Co., Indianapolis.

★**Texas**—Dallas Southern Traction Co. let contract 59-mi. line from Dallas to Irving and Cleburne to Creek Constr. Co., Sapulpa, Okla. Noted June 14.

★**Oklahoma**—Atchison, Topeka & Santa Fe Ry. let contract 63 mi. line from Ralston to Owen, via Pawhuska and through oil fields, to Maney Bros. & Co., 304 Empire Bldg., Oklahoma. Noted June 7.

★**Oklahoma**—Buffalo Northwestern Co. of Buffalo let contract 52 mi. standard gauge railway, 2600 ft. pile bridge over Cimarron River and 7 small pile bridges, to Walker & Bell Constr. Co., Ft. Worth, Tex., $300,000.

★**Idaho**—Oregon-Washington R.R. & Navigation Co., Portland, let contract Pine Creek extension to Twohy Bros., Spokane and Portland, $300,000.

★**California**—Bd. Pub. Wks., San Francisco, let contract Municipal Ry. unit through Twin Peeks tunnel to Eaton & Smith, 407 11th St., San Francisco, $81,000. Noted July 5.

EXCAVATION AND DREDGING

Proposed Work

N. Y., Buffalo—Dredging—City preparing plans dredging lands between Buffalo River and City ship canal to depth of 23 ft., to extend and enlarge city harbor G. H. Norton, city engr.

La., Crowley — Drainage — Arcadia Co. Comrs. created new drainage district in 4th Ward. Bonds for $60,000 to be voted for project.

Minn., St. Cloud — (Official) — Ditch—N. Thomey, co. aud., received no bids for Co. Ditch No. 41, requiring 7764 cu.yd. excav. and furnishing and laying 8850 ft. of 12-in. tile, 1 24-in. drain head and 1 10-ft. 16-in. terminal box. Noted June 21.

Cal., Dos Palos—Irrigation—City to organize irrigation district to be known as Tierra Loma Irrigation Dist., involving 92,000 acres, 52 mi. canal, 1 mi. tunnel through mountains, 288 mi. 1 ft. laterals and meters at all section lines. Water will be taken from San Joaquin River. About $300,000. D. M. Steyer, South Dos Palos, chn.

Cal., Stockton—Irrigation—West Side Irrigation Dist. sold $590,000 bonds for irrigation project. W. G. Hunter, engr.

BIDS DESIRED

O., Portsmouth—(Official)—Reclamation—Until Aug. 10 by Bd. Co. Comrs. for flood defense system to reclaim about 100 acres, plans involve change of channel of Scioto River at point north of Lucasville Bridge, 76,893 cu.yd. excava. and 18,625 ft. piling. S. D. Eckhart, aud. and clk. Noted Apr. 19.

Ia., Mason City—Drainage—Until Aug. 6, by G. E. Frost, aud. Cerro Gordo Co. building D. D. No. 51; Main line, Sect. 1 involves 12,930 ft. 10-, 12-, 14, 15-, 16-, 20-, 22-, 24-, 26-in. tile; Sect. 2 including Laterals Nos. 2B, 2C, 3, 3A, 3B, 4, 4½, 4¾, 5, 6, 6A, 6½, 7, 8, 9, 10, 16,950 ft. 6-, 7-, 8-, 9-, 10- and 12-in. tile.

Ia., Sibley—Drainage—Until Aug. 13, by Bd. Supervs. Osceola Co. building D. D. No. 37, involving 1900-ft. open ditch containing 2500 cu.yd., 56,450 ft. 6- to 30-in. tile, bulkheads, inlets, etc. About $32,000. D. W Clayton, aud.

Minn., Faribault—Ditch—Until Aug. 17. by Comrs. Rice Co., digging and building Co. Ditch No. 12, involving 51,300 lin ft. open ditch and removing 176,790 cu yd earth, temporary bridges, concrete waterfall, extending foundation walls of highway bridge, cost $23,274; furnishing and laying 31,300 lin.ft. tile including trenching, backfilling end walls, $9134.

Minn., Mankato—Until Aug. 9, by C. L. Kennedy, co. aud., building Co. Ditch No. 47 involving 42,650 ft. 8- to 34-in. tile, 1000 cu.yd. cleanout work, 6-ft. bottom.

Minn., St. Cloud—Ditch—Until Oct. 2, by Stearns Co., building Co. Ditch No. 40 involving 18,769 cu.yds. About $12,899. N. Thomey, aud. Noted July 5.

Mo., Jefferson City—Excavation—Until Aug. 7, by Cole Co., grading and excavating solid rock ditches, Sect. 20, Twp. 43. E. F. Harding, co. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Ky., Calhoun** — (Official) — Drainage—Bd. Drainage Comrs. let contract D.D. No 7 to J. N. Fiorgy, Owensville, $14,900. Noted July 12.

★**Ky., Louisville** — Ditch — Jefferson Co. let contract improving Big Ditch to T. B. Miller & Sons Co., $30,420.

★**Tenn., Huntingdon—Reclamation**—Carroll Co. D.D. No. 1 let contract for ditches and canals to reclaim 12,500 acres, involving 1,226,000 cu.yd. excava., to Canal Constr. Co., 189 West Madison St., Chicago, 8¾c. per cu.yd. Noted July 5.

★**Ind., Auburn**—Ditch—De Kalb Co. let contract 7 mi. dredge ditch known as David Lein drain, Fairfield and Smithfield Twps., to W. A. Daniels, Auburn and C. A. Walb, La Grange, $12,100.

★**Ia., Mason City** — Drainage — Cerro Gordo Co. let contract drainage work, Dist. No. 53, to A. W. Dunlap, $18,529. Noted July 19.

★**Ia., Nevada**—Drainage—Story Co let contract Drain No. 80 as follows: Tile to Macomb Sewer Tile Co.; Macomb, Ill., $28,982; open work to J. McKillip, Faribault, Minn., 19½c. per yd.; labor to Fry & Hankins, $11,533.

★**Minn., Mankato**—Ditches—Blue Earth Co. let contract Ditch No. 52, Sterling Twp., to C. C.Knudson, Blue Earth, $20,350; Ditch No. 51, Ceresco Twp., to Judson Concrete Co., Judson, $3475.

Cal., Chino—Ditch—Chino Storm Water Dist. received low bid 91,000 cu.yd. excava. for storm water ditch from Los Angeles Rock & Gravel Co., 3439 Pasadena Ave., Los Angeles, $11,830.

INDUSTRIAL WORKS

Proposed Work

Mass., New Bedford—Pairpont Co. plans 4-story, 100 x 200-ft. brick storehouse on Howland St. About $100,000.

Mass., Worcester—Burgoss Lang & Co., 201 Sears Bldg., Boston, plans 8-story, 60 x 250 ft. plant on Central and Commercial Sts. Monks & Johnson, 78 Devonshire St., Boston, archts.

N. Y., Buffalo — Curtiss Aeroplane Co., 1738 Elmwood Ave., plans new additions to plant on Elmwood Ave.

N. J., Jersey City—Ntl. Storage Co., Communipaw Ave., plans storage warehouse in South Cove Sect. About $50,000.

N. J., Newark—Federal Shipbuilding Co., Trenton, has purchased 68 acres land on Newark meadows and will erect shipbuilding plant. About $3,000,000. E. H. Gray, United States Steel Corp., interested.

Pa., Point Breeze—(Phila. P. O.)—American Refining Co., 112 North Broad St., Phila., plans rebuilding oil plant recently destroyed by fire with loss of $400,000. J. W. Van Dyke, pres.

Pa., Temple — Temple Malleable Iron & Steel Co. plans 10-brick, stone and concrete foundry buildings. F. O. Case, Peoples Gas Bldg., Chicago, archt.

Ga., Augusta—Grogan & O'Dowd, Jones Reynolds and 9th Sts., having plans prepared by Lawrence Constr. Co., Augusta, 200 x 250-ft. warehouse, to be built in 10 compartments each to have capacity of about 1500 bales of cotton.

Industrial Work (Continued)

O., Akron—Canton & Youngstown Ry. plans large terminal freight warehouse on Furnace St. About $1,000,000. J. A. Donahey, Akron, ch. engr.

O., Cincinnati—Cincinnati Gas & Electric Co., 4th and Plum Sts., plans $2,500,000 bond issue for improving and extending plant.

O., Cleveland—Cleveland Macaroni Co., 7275 Wentworth Ave., plans 3-story, 130 x 201-ft. addition to plant. About $60,000.

O., Cleveland—Fen Far Co., 2163-71 East 9th St. plans 2-story factory, garage and repair shop. About $110,000. F. C. Warner, Hippodrome Bldg., archt.

O., Cleveland — W. McClellan File Co., 3444 Hamilton Ave., N. E., plans 2- and 3-story, 32 x 190-ft. plant. About $130,000. Briggs & Nelson, Rose Bldg., archts.

Ind., Goshen—Studebaker Corp., Administration Bldg., South Bend, plans forging and heating plant here. About $150,000.

Ind., Richmond — Richmond Commercial Club plans to build incubator factory. About $50,000.

Ill., Chicago—Felt & Tarranf Co., 1717 North Paulina St., plans 5-story brick warehouse. About $60,000. L. G. Haulberg, archt.

Ill., Chicago—Mark Co., 103 East Front St., plans to build large steel plant at East Chicago. About $6,000,000.

Ill., Rock Island—Armour & Co., 105 Rock Island St., plans addition to plant, Front and Rock Island Sts. About $100,000.

Minn., Duluth—Minnesota Steel Co., Gory St., plans new buildings. About $2,000,000.

S. D., Huron — Farmers' Coöperative Packing Co. plans to build rein.-con. packing plant here. About $450,000.

Tex., Memphis—Memphis Cotton Oil Co., Memphis, has increased its capital stock from $75,000 to $200,000 and plans to enlarge plant. About $125,000.

Cal., Long Beach — Merchants Marine Constr. Co., 1st Natl. Bank Bldg., plans shipbuilding plant on inner harbor. About $500,000.

Cal., Los Angeles—Southern California Edison Co., 129 East 4th St., plans to spend $10,000,000 for extending and improving its power developing and distribution system. The company will apply to the State R.R. Comn. for permission to issue this amount of stock.

Que., Chambly Canton—Canadian Leatherboard Co. plans to build plant here. About $250,000.

Que., St. Lambert—Dominion Textile Co., 112 St. James St., Montreal, plans textile plant here. About $60,000.

Ont., Hamilton—Canada Screw Co., 334 Wellington St., W., plans addition to plant. About $100,000.

Ont., Strathroy—Strathroy Canning Co. plans rein.-con. and brick factory. About $200,000. T. Dunn, mgr.

Ont., Toronto — Willys-Overland, Ltd., Weston Rd., will build plant, brick and concrete. About $60,000.

B. C., Vancouver—Cotton Co., Ltd., plans shipbuilding plant at False Creek. About $100,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston**—Boston Wharf Co., 259 Summer St., let contract 7-story warehouse on Midway St., South Boston, to W. F. Kearns Co., Albany St., Cambridge. About $130,000.

Mass., Boston—Burgess Lang & Co., 201 Sears Bldg., received bids for new 4-story, 30 x 200-ft. brick and concrete plant and addition on Brighton St. from W. M. Bailey Co., 88 Broad St., I. F. Woodbury & Sons Co., 185 Summer St., G. A. Fuller Co., 131 State St., R. H. Howes Constr. Co., 105 West 40th St., New York and J. T. Scully, 1st St. E., Cambridge.

★**Mass., Worcester** — Consolidated Rendering Co., 49 North Market St., Boston, let contract 3-story, 50 x 164-ft. brick and rein.-con. plant to G. A. Fuller Co., 1110 Park Bldg. About $50,000.

★**N. Y., S. I.—Mariners Harbor**—Staten Island Shipbuilding Co., 1983 Richmond Terrace, Port Richmond, let contract machine shop, boiler shop and tool room to J. Milnes, Port Richmond.

★**N. J., Jersey City**—United Realty Co., c/o L. S. Beardsley, 38 West 32nd St., New York City, archts., let contract 7-story, 100 x 100-ft. factory addition on Provost and Bay Sts. to Turner Constr. Co., 244 Madison Ave.

★**N. J., Newark**—Aluminum Goods Mfg. Co., Springfield Ave., let contract 6-story, 100 x 260-ft. factory on Ridgewood St., to W. W. Oeflein, Manitowoc, Wis.

★**Md., Baltimore**—Baltimore Drydock & Shipbuilding Co. let contract office building and warehouse on Locust Point to West Constr. Co., Amer. Bldg. About $50,000.

★**O., Cleveland**—A. & B. Realty Co., 4500 Euclid Ave., let contract, 4-story, 82 x 192-ft., rein.-con. garage on Euclid Ave. and 46th St. to J. C. Gloyd Constr. Co., Hippodrome Annex. About $100,000. Noted July 19.

★**O., Cleveland**—American Express Co., Lakeside Ave. and East 17th St., let contract 2-story, 116 x 132-ft. addition to garage to Craig Curtiss Co., Guardian Bldg. About $120,000.

★**O., Cleveland**—Cleveland Electric Illuminating Co. let contract brick, steel and rein-con. power plant, 720 East 20th St., to Turner Constr. Co., 244 Madison Ave., New York City, $100,000.

★**Ind., Indianapolis** — Pennsylvania R.R. Broad St. Sta., Phila., let contract 150 x 300-ft. rein.-con. roundhouse to Alliance Constr. Co. About $120,000.

BUILDINGS

Proposed Work

Conn., Westport—School—Bd. Educ. having plans prepared, 2-story, 60 x 115 ft. at Myrtle Ave. About $65,000. P. N. Sunderland, 7 Spring St., Danbury, archt.

N. Y., New York—Theater and Store—E. Higgin, 1 Madison Ave., plans, between 94th and 95th Sts. About $200,000. G. Keister, 56 West 45th St., archt.

N. Y., Potsdam — Normal School — Bd. Educ. soon receives bids. About $275,000.

N. Y., Queens—School—Bd. Educ. plans 2 additions to Bryant School. About $350,000.

N. J., Asbury Park—Hotel and Convention Hall—Chamber of Commerce plans hotel and convention hall to occupy 1 block About $1,000,000. Address J. D. Carton, 505 2nd Ave.

N. J., Jersey City — Terminal — City Comrs. plan to build. About $1,038,000. Address G. F. Brensinger, 75 Montgomery Ave.

N. J., Newark—Denison University plans rebuilding and extending several buildings. About $1,000,000.

N. J., Princeton—Princeton University having plans prepared for several new buildings. Day & Klauder, 925 Chestnut St., Phila., archts. Address R. M. Anderson, 275 Nassau St.

N. J., Trenton—School—Bd. Educ. Hamilton Twp. plans 2-story, 85 x 122 ft. on Greenwood Ave. W. W. Slack & Son, St. Regis Bldg., archt.

Pa., Chester—High School—Bd. Educ. plans, 3-story, stone. About $400,000. C. S. Adams, 1509 Arch St., Phila., archt.

Pa., Fairview—Wards, etc.—State Commission for Treatment of Criminal Insane plans to build. About $80,000. H. F. Walton, 284 City Hall, pres., and J. C. M. Shirk, 421 Chestnut St., archt., both of Phila.

Pa., Glenside—Club House—Lulu Temple Country Club will build, 2-story, 52 x 204-ft. About $150,000. C. T. Martin, c/o Kensington Trust Co., Kensington and Allegheny Aves., pres., and H. W. Castor, Stephen Girard Bldg., archt., both of Phila.

Pa., Holmesburg—House of Correction—City plans brick and concrete addition. About $90,000. C. E. Oeschlager, Harrison Bldg., Phila., archt.

Pa., Miners Mills—School—Bd. Educ. plans 2 new buildings. About $100,000. P. Mayock, secy. A. L. Reilly, Bennett Bldg., Wilkes-Barre, archt.

Pa., Phila.—Office and Store—Cunningham Piano Co., 50th and Parkside Sts., having plans prepared, 10-story, brick, concrete and steel, at 1312-14 Chestnut St. A. J. Sauer & Co., 1114 Chestnut St., archts.

Pa., Pittsburgh—Hospital—Mercy Hospital, Pride and Vickory Sts., plans 2-story addition. About $89,000.

Md., Baltimore — Church — University Baptist Church plans new building on Charles St. and Greenway Ave. About $175,000. W. M. McCormick, Baltimore Commercial Bank, chn. bldg. com. M. A. Long, Baltimore & Ohio Bldg., archt.

Md., Hagerstown—Y. M. C. A. receives bids about Sept. 1, for 2- and 4-story, 80 x 195-ft. About $150,000. J. C. Byron, Negley Bldg., chm. bldg. com. H. E. Yessler, 17 Hamilton Row and M. A. Kountz, Negley Bldg., archts. Noted June 21.

Wash., D. C.—Home Savings Bank soon lets contract for 6-story, 35 x 70-ft. addition. About $100,000. B. F. Gaul, 7th and Massachusetts Aves., N. W., pres. C. Waggaman, 1211 Connecticut Ave., archt.

Wash., D. C.—Club—(Official)—Washington Athletic Club receives bids about Aug. 10, 12-story, 133 x 150-ft. About $65,000. Milburn, Heister & Co., Union Savings Bank Bldg., archts. Noted July 19.

Wash., D. C.—Recreation Hall—Knights of Columbus, c/o L. O'Horn, Woodward Bldg., had plans prepared, 1-story, 60 x 100-ft. About $200,000.

W. Va., Charleston—Hotel—Holley Hotel plans 4-story addition. About $50,000. E. Ern, Quarrier St., mgr. C. C. & E. A. Weber, Citizens Bldg., Cincinnati, archts.

W. Va., Keyser—State Bd. Control plans replacing University of West Virginia building recently destroyed by fire. About $120,000. P. A. Davis, 1713 Sansome St., Phila., archt.

W. Va., Lindsey—Dormitory—Lindsey Institute plans, 3-story, near Eoff St. About $50,000.

Miss., Grenada — Church — University Baptist Congregation plans church, parsonage and Sunday-School. About $175,000. W. M. McCormick, Baltimore Commercial Bank, chn. bldg. com.

Miss., Jackson—Dormitory—Millsap College having plans prepared by H. N. Austin, archt., Century Bldg. About $65,000.

La., Merryville—High School—Bd. Educ. plans election August 1, to vote on $70,000 bond issue to build high school. Address President of School Bd.

Tenn., Nashville—City plans election to vote on following bond issues: Fire hall, $55,000; hospital, $45,000; library, $125,000. Address J. H. Faucette, City Hall, mayor.

Tenn., Nashville—School—City plans to vote, in September, on $125,000 bond issue for school. Address R. Ewing, mayor.

Ky., Lexington — Fayette Turberculosis Sanatorium plans to build. About $55,000.

Ky., Paducah—Hospital—Illinois Central R.R. plans rebuilding hospital recently destroyed by fire. About $50,000 to $75,000. S. Baldwin, 135 East 11th Pl., Chicago, ch. engr.

O., Akron — Parish House — St. Pauls Episcopal Church soon receives bids, 2-story, 40 x 300-ft. About $75,000. F. Sherman, 58 North Forge St., pastor. F. L. Packard, 1212 Hayden Bldg., Columbus, archt.

O., Cleveland — School — Holy Family Congregation plans, brick, at 3855 East 131st St. About $50,000. W. Koehl, 906 Park Bldg., archt.

O., Columbus—Club House—Ohio State University soon lets contract. About $150,000. J. N. Bradford, Hayden Bldg., archt.

O., Dayton — Church — Beulah Baptist Church plans to build on Kercheval and McClellan Aves. About $50,000. G. G. Laughlin, pastor.

O., Dayton — Office — Germania Bldg., Assn. having plans prepared by Peters, Hermann & Brown, archts., Reibold Bldg., new building at 5th and Main Sts.

Mich., Grand Rapids—Nurses' Home—Hackley Hospital, Clinton St., having plans prepared by H. H. Weemhoff, archt., Murray Bldg., 72 x 120-ft. About $65,000.

Mich., Highland Park — Hospital — City plans. About $250,000 available. G. W. Graves, 120 Oregon Ave., Detroit, archt.

Ill., Chicago — Hotel — Kercher Hotel & Bath Co. having plans prepared, 10-story, 80 x 170-ft., at 410-16 Wabash Ave. About $750,000.

Ill., Park Ridge—Church—Park Ridge Methodist Congregation plans to build. About $50,000. F. C. Jorgeson, chm. bldg. com. C. A. Eckstrom, 5 North LaSalle St., Chicago, archt.

Ill., Rock Island — Hospital — St. Anthony's Hospital had plans prepared by H. B. Dox, archt., 301 Powell Bldg., Peoria. Bids soon. About $200,000.

Wis., Madison—Infirmary—University of Wisconsin plans to build. About $50,000. M. E. McGaffrey, University Administration Bldg., secy. A. Peabody, Capitol Bldg., archt.

Wis., Madison—Theater—Finn & Heiman, 104 Michigan Ave., Chicago, having plans prepared by G. Rapp, archt., 69 West Washington St., Chicago. About $75,000.

Buildings (Continued)

Wis., Milwaukee—Church—Holy Ghost Church plans, 68 x 172 ft. About $59,000. Rev. C. M. Grobschmidt, R.R. No. 1, Sta. D., Nicholson Rd., pastor.

Wis., Wauwatosa—Temple — (Official) — Wauwatosa Lodge No. 267 receiving bids about Aug. 10. F. A. Stevens, chn. bldg. com. Leenhouts & Guthrie, 301-404 Jefferson St., Milwaukee, archts. Noted July 19.

Ia., Des Moines—Natatorium—City plans 2-story natatorium, swimming and wading pools. About $200,000. F. E. Wetherell, Youngerman Bldg., archt.

Ia., Gordon—School—City voted on $60,000 bond issue to build school.

Ia., Manly — Hospital — Polk Co. plans election Oct. 15 to vote $100,000 bond issue to build hospital. F. J. Alber, aud.

Ia., Sioux City—Church—Trinity Lutheran Congregation having plans prepared by Buettler & Arnold, archts., 610 Security Bank Bldg., 74 x 113-ft. brick and stone. About $75,000.

Ia., Sioux City—Church—First Baptist Congregation having plans prepared by Beuttler & Arnold, archts., 610 Security Bank Bldg., 66 x 130-ft. brick and Bedford stone. About $85,000.

Ia., Sioux City—Home—Woodbury Co. plans, about $100,000. W. L. Steele, 502 United Bank Bldg., archt.

Ia., Ventura—School—City plans election Aug. 20 in Consolidated Dist. to vote on $50,000 bond issue to build school.

Kan., Peabody—School—Bd. Educ. plans, 2-story, 65 x 110-ft. About $50,000. A. Kent, secy. G. W. Van Meter, 604 Caldwell Murdock Bldg., Wichita, archt.

Kan., Wichita—Church—First Methodist Episcopal Church soon receives bids, 1-story, 100 x 130-ft. About $85,000. H. Imboden, chm. J. Gaisford, Goodwyn Inst. Bldg., Memphis, archt.

Kan., Wichita—School— Bd. Educ. receives bids about Nov. 1, for 2-story, 100 x 155-ft. intermediate school. About $120,000.

Neb., Norfolk—Hospital—Drs. Campbell & Baker plan, 3-story, 34 x 82 ft., brick, stone and rein.-con. About $60,000. J. T. Allen, 224 Brandies Theatre Bldg., Omaha, archt.

Neb., Omaha — Laboratory — Nebraska Medical College plans, 4-story, 101 x 101 ft., on 42nd and Dewey Aves. About $110,000. J. Latenser & Sons, Baxton Blk., archts.

N. D., Fargo—School—Bd. Educ. plans. About $200,000. W. B. Ittner, Bd. Educ. Bldg., St. Louis, archt.

Mont., Great Falls—Office—Great Falls Brick & Tile Co. plans new building. About $100,000. G. H. Shanley, 1st Natl. Bank Bldg., archt., soon receives bids.

Mo., Kansas City — School — Sweeney Auto School plans, 10-story, 102 x 120-ft. brick and rein.-con. About $180,000. E. J. Sweeney, 1110 East 15th St., pres. Keene & Simpson, 400 Reliance Bldg., archts.

Mo., Kansas City — Church — Third Church of Christ, Scientist plans. About $100,000. Address The Reader.

Mo., St. Louis—Hospital—City will vote Nov. 6 on $150,000 bond issue to build Koch Hospital. Address E. Glenman, City Hall Bldg., mayor.

Tex., El Paso—Church—Calvary Houston sq. Baptist Church plans, 3-story, 90 x 120-ft. About $100,000. A. H. Thorman, 425 1st Natl. Bank Bldg., archt.

Tex., Ft. Worth—Station—Texas & Pacific Ry. plans, steel, concrete and stone. About $800,000. H. Chamberlin, Dallas, ch. engr.

Tex., Houston—Mausoleum—Mausoleum & Monument Constr. Co., Carter Bldg., plans to build. About $200,000 to $500,000.

Okla., Miami—Bank and Office—B. T. Hainer and A. James plan, 4- or 5-story, 75 x 120-ft. brick and rein.-con. About $180,000. J. W. Roberts, Claremore, archt.

Okla., Oklahoma—Hospital—City Comrs. soon let contract to build hospital as addition to University Medical School. About $200,000. E. Overholser, mayor.

Okla., Oklahoma—Station—St. Louis & San Francisco Ry. plans, 2-story brick, stone and rein.-con. About $300,000. G. H. Schleyer, Oklahoma, genl. mgr. Lenanbaum, Maix & Vegeant, archts., 175 West Jackson Blvd., Chicago, receive bids about Aug. 30.

Wash., Olympia—High School—Bd. Educ. plans to build here. Stephen & Stephen, New York Bl., Seattle, archts. About $100,000.

Ore., Portland — School — Dir. Cleveland Hebrew School and Institute plan to rebuild, on Portland Ave. and East 55th St. About $75,000 to $100,000.

Cal., Bakersfield—Gymnasium—Kern Co. Union High School Dist. soon lets contract, 1-story, 84 x 152-ft. About $60,000. O. L. Clarke, 422 Brower Bldg., archt.

Cal., Long Beach—Schools—City defeated $150,000 bond issue for improving schools. Noted June 21.

Cal., Los Angeles—Bd. Pub. Ser. having plans prepared for 5-story, rein.-con. and brick addition to shops and offices at 201 Rose St. About $55,000. J. Vroman, secy.

Cal., Oakland—(Official)—Almshouse and Poor Farm—Alameda Co. plans election Aug. 14 to vote on $1,000,000 bond issue for additions and improvements at almshouse and poor farm.

Cal., Turlock—High School—Bd. Educ. plans new building on Lander Ave. About $65,000.

N. B., Bathhurst—College—Sacred Heart College plans new buildings, brick. About $250,000. R. A. Frechette, 30 Bonnacord St., archt.

Ont., London—Church—Parish of Limoilou plans new brick and stone building. About $200,000. J. P. Ouellet, archt., 28 St. Famille St., soon receives bids.

BIDS DESIRED

Vt., Vergennes—Industrial School—Until Aug. 10, by Bd. Educ. F. L. Austin, 240 College St., Burlington, archt.

N. Y., Hudson Falls—(Official)—School—Until Aug. 15, by W. L. Sawyer, clk. bd. educ. About $120,000. Noted June 21.

N. Y., New York—High School—Until Aug. 8 by C. B. J. Snyder, supt. bd. educ., Park Ave. and 59th St. for completing Evander Childs High School, East 184th St. (Bronx Boro.). About $50,000.

N. J., Morristown—Hospital—Until Aug. 8, by Morristown Memorial Hospital Assn. Palmer & Hornbostle, 63 Williams St., New York City, archts. Noted May 10.

N. J., New Brunswick—School—Until Aug. 24, by Bd. Educ., 3-story, 200 x 200 ft., Livingston Ave. and Walton St. About $275,000. A. Merchant, 363 George St., archt.

La., Winnfield—Court House and Jail—Until Aug. 13, by Police Jury of Winn Parish. W. L. Stevens, White Central Bldg., New Orleans, archt.

O., Cleveland—(Official)—Library—Until Aug. 7, by C. Lorenz, secy. pub. library bd., 1375 Euclid Ave., on West 25th St. and Maplewood Ave.

O., Columbus—School—(Official)—Until Aug. 3, by Bd. Educ. Perry Twp., Franklin Co., new school, near Linworth. F. L. Packard Co., 16 East Broad St., archt.

Minn., Tower—School—Until Aug. 15, by M. Jeranson, clk. bd. educ., in School Dist. No. 9, St. Louis Co. W. T. Bray, 1200 Fidelity Bldg. Duluth, archt.

Kan., McPherson — High and Grade Schools—Until Aug. 8, by G. Nyquist, clk. bd. educ. Markgraf & Mampe, 413 Ridge Bldg., Kansas City, archts.

Tex., El Paso—Lodge—Until Sept. 10, by Scottish Rite Benevolent Assn. About $180,000. Hubbell & Greene, 619-20 North Texas Bldg., Dallas, archts.

Cal., Modesto—School—Until Aug. 22, by S. C. Nowten, clk. bd. trustees, for 3 concrete and tile buildings. About $135,000. DeRemer & Hewitt, 624 Title Insurance Bldg., Los Angeles, archts. Noted Apr. 19.

B. C. Burnaby—Studio—(Official)—Until Aug. 15, by Dominion Film Co., 412 Orpheum Bldg. About $50,000 to $75,000. Noted July 19.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Hyde Park—High School—Bd. Educ. let contract, 3-story, 40 x 131 ft. Harvard Ave., Everett and Webster Sts., to J. Bowen, 184 Dudley St., Roxbury. About $89,990.

★Mass., South Framingham — Theatre, Store and Office—Trimount Theatres, Inc., c/o G. A. Giles, Cambridge, let contract 1- and 2-story, 72 x 148 ft., brick and stone, to Haynes Constr. Co., 40 Court St. About $500,000.

★N. Y., New York City—(Official)—Store—J. C. Davies, 149th St. and 2nd Ave., let contract, 1-story, brick, on Burnside and Jerome Aves. (Bronx Boro.) to P. Murphy, 371 East 144th St. About $50,000. Noted July 12.

★N. J., Camden—Wood Mfg. Co., 7th and Erie Sts., let contract 1-story, 72 x 265 ft. brick and concrete plant to Barclay White & Co., 1713 Sansom St., Phila. About $50,000.

★Pa., Phila.—Gorgas-Pierce Mfg. Co. let contract 5-story, 75 x 155 ft. rein.-con. warehouse at 114 East Allen St., to Turner Concrete Steel Co., 1715 Sansom St.

Fla., Jacksonville—Bd. Pub. Instruction of Duval Co. received low bids for 8-room addition to Lackawanna school from O. P. Woodcock, Trade Bldg. About $52,400.

★La., New Orleans—College—Newcomb Memorial College let contract for additions to G. J. Glover, Whitney Bldg. About $648,000.

★Ky., Louisville—First Church of Christ, Scientist, let contract, stone, steel and concrete, to Rommel Bros., 919 East Bway. About $200,000.

O., Bedford — (Official) — School — Bd. Educ. received low bids from R. G. Evans Co., Savings & Trust Bldg., Columbus, J. Kaiser & Bros Co., Elyria and Crump Eng. Co., Leader-News Bldg., Cleveland. About $50,000. Noted July 26.

★O., Cleveland—Hotel—Doan-Brook Co., 10702 Superior Ave., let contract, brick, at 1928 East 105th St. to Bolton-Pratt Constr. Co., Columbia Bldg. About $200,000.

★O., Dayton—Lodge—Dayton Aerie of Eagles No. 321 let contract, 1-story, 80 x 100-ft., to Engle & Cohn, 207 Lexington Ave. About $50,000.

★O., Lorain—Store and Lodge—Lorain Aerie No. 343 let contract, 4-story, 50 x 135-ft., to Stauder & Cook, 1050 9th St. About $60,000.

★O., Martins Ferry—School—Bd. Educ. let contract for new Elms School to C. D. Keyser, Bellaire. About $72,000. Noted July 5.

★O., Rocky River—School—Bd. Educ. let contract, brick, to Willing Bros., Bellevue. About $70,000. Noted June 28.

★O., Struthers—Church—St. Nicholas Creek Congregation let contract, 1-story, 54 x 110-ft., to L. Adavasio, Dollar Bank Bldg., Youngstown. About $60,000. Noted Apr. 26.

★O., Warrensville—Sanatorium—City let contract school and 3-ward buildings at Warrensville Sanatorium to Cleveland Fireproof Constr. Co., 412 Anisfield Bldg. About $78,986.

★Ind., Decatur—High School—Bd. Educ. let contract, 2-story, 70 x 160-ft., to W. F. Peterson, Chicago, $68,620. Noted June 21.

★Ill., Chicago—Hotel—T. Swanson, 701 Tacoma Bldg., let contract 7-story, brick and steel, at 412-22 Wrightwood Ave., to Olson-Carson Co., Chicago. About $50,000

★Ill., Joliet—Standard Paint Co., Woolworth Bldg., New York City, and Joliet, Ill., let contract 13 brick factory buildings to Hansen & Deterson Co., Joliet.

★Wis., Osceola—High School—Bd. Educ. let contract Linstrom & Anderson, 1493 Grand Ave., St. Paul. About $50,000.

★Wis., Racine—Bank and Office—Manufacturers Natl. Bank let contract to Anderson, Strandberg Co., 19 South La Salle St., Chicago. About $50,000.

★Wis., Stevens Point—Depot—Minneapolis, St. Paul & Sault St. Marie Ry. let contract to Withee Constr. Co., Withee, $50,000.

★Ia., Bronson—School—Bd. Educ. let contract, 2-story, brick and stone, to C. F. Lytle Constr. Co., Lytle Blk. About $50,000. Noted July 5.

★Ia., Des Moines—Hotel and Office—F. M. Hubbell & Co., Hubbell Bldg., let contract rebuilding, 3-story, brick and rein.-con., at 801-815 6th Ave. to J. C. Mardis Co., 412 Hubbell Bldg. About $50,000.

★Ia., Sioux City—Junior High School—Bd. Educ. let contract, 2-story, 104 x 132-ft., to N. Olen, 810 19th St. About $85,000.

★Kan., Larned—Court House—Pawnee Co. let contract, 4-story, 11 x 92-ft., brick, stone and rein.-con., to W. Foley, Dodge City. About $125,000. Noted June 14.

Buildings (Continued)

★Neb., Columbus—Store—T. Friedhof let contract, 2-story, brick and rein.-conc., to H. F. Woerth. About $65,000.

★Mont., Livingston—High School — Bd. Educ. let contract addition to Park Co. high school to Pew Constr. Co., Helena. About $71,000. Noted July 5.

★Okla., Ardmore—Hotel—Ardmore Hotel Co. let contract 6-story, 100 x 100 ft., brick, to G. W. Stiles Constr. Co., 209 LaSalle St., Chicago. About $200,000.

★Okla., Tulsa—Store—Commerce Bldg. Co., 2nd and Main Sts., let contract, 4-story, 43 x 140 ft. brick, steel and rein. con. to J. R. Burnside. About $75,000. Noted July 19.

★Cal., Pasadena—Hertel Dry Goods Co., 4147 North Raymond St., let contract, 3-story brick, on Colorado St. and Euclid Ave., to J. F. Rhodes, 415 Central Bldg., Los Angeles. About $75,000.

FEDERAL GOVERNMENT WORK

Proposed Work

Mass., Newburyport—Post Office—J. A. Wetmore, superv. archt., treas. dept. Wash., rejected bids opened July 16. Noted July 26.

Okla., Ft. Sill—Observers' Camp—N. D. Baker, secy. war, soon lets contract observers' camp for army signal corps. About $500,000.

BIDS DESIRED

Pa., Ft. Mifflin—Chief Gunners' Quarters—Until Aug. 13, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., 2-story, concrete footings, hollow terra cotta tile walls, etc. at Naval Ammunition Depot.

Pa., McKees Rocks—Post Office—Until Sept. 4, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Wash., D. C.—Torpedo Storehouse—Until Aug. 20, by Bureau Yards and Docks, (F. R. Harris, ch.) Navy Dept.

Ga., Forsyth—Post Office—Until Sept. 6, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Ga., Washington—Post Office—Until Sept. 5, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Tenn., Memphis—(Official)—Levee Work—Until Aug. 24, by Mississippi River Comn. U. S. Engr. Office, Customhouse, building 3,400,000 cu.yd. earthwork, Upper and Lower St. Francis and White River Dists.

Mich., Detroit—(Official)—Engine Shelters—Until Aug. 28, by U. S. Engr. Office, building 8 engine shelters for 4th Lock at St. Marys Falls Canal; advertised in this issue.

Mich., White River — Buildings and Launchway—Until Aug. 21, by E. P. Bertholf, capt. commandant, U. S. Coast Guard, Wash., for moving, alterations, additions and repairs to station building and launchway at Coast Guard Sta. No. 268.

Ark., Rodgers—Post Office—Until Aug. 3, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Colo., Glenwood Springs—Post Office—Until Aug. 20, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Wash., Puget Sound—(Bremerton P. O.)—Storehouse—Until Aug. 13, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., at Navy Yard.

Alaska, Ketchikan—Towers—Until Aug. 13, by Light House Inspector, furnishing 2 steel towers.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Me., Ft. Fairfield—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids from W. H. Fissell & Co., 34th St. and B'way, New York City, limestone, $65,300; sandstone $68,300. Noted June 21.

★N. Y., Mineola—Aviation School—War Dept., Wash., let contract to Clough-Bourne Co., 101 Park Ave., New York City, cost plus percentage basis.

★Wash., D. C.—Cement—U. S. Engrs.' Office let contract 15,000 bbls. portland cement for Key Bridge to Security Cement & Lime Co., 807 Equitable Bldg., Baltimore, $1.81 per bbl.

Wash., D. C.—Lumber—Engr. Depot and Purch. Officer received low bids (a) 650 pieces rough heavy timber, (b) 2,765,664 ft. No. 1 common timbers, (c) 1,518,256 ft. lumber surfaced 4 sides; (d) 1641 ft. lattice strips, from J. G. Rainwater Lumber Co., Whitney Bldg., New Orleans, (a) $12,297, (b) $121,689 (c) $66,803, (d) $72.20, time 90 days; T. E. Cole Lumber Co., Phila., (b) $91,267 (c) $50,102; time 90 days.

★Wash., D. C.—Roads—N. D. Baker, secy. war, let contract roads at new naval base, Hampton Rds., Va., to Atlantic Bitulithic Co., Virginia Ry. & Power Bldg., Richmond, cost plus 10% basis.

★S. C., Beaufort—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to Wise Granite & Constr. Co., Amer. Natl. Bank Bldg., Richmond, $39,945. Noted July 5.

Tenn., Gallatin—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash. received low bids from R. P. Farnsworth & Co., Owensboro, Ky., $37,500; Rock City Constr. Co., 150 4th Ave., Nashville, $39,630; R. K. Stewart & Son, South Boston, Va., $40,060. Noted June 28.

★Ill., Hoopeston—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to Clarke Constr. Co., 306 Temple Bldg., Danville, $53,699. Noted July 26.

★Neb., Omaha—Baracks—N. D. Baker, secy. war, let contract to E. A. Wickham, 19 Scott St., Council Bluffs, $200,000.

Tex., Vernon—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, from W. D. Lovell, Minneapolis, $41,700; Johnson Constr. Co., Fargo, N. D., $44,997; J. F. McKnight, Hallettsville, $45,500. Noted June 28.

★Okla., Ft. Sills — Encampment — N. D. Baker, secy. war let contract National Guard encampment to Selden Breck Constr. Co., Fullerton Bldg., St. Louis.

★Cal., Linda Vista—(San Jose P. O.)—Army Cantonment—N. D. Baker, secy. war, let contract to W. E. Hampton Co., Trust & Savings Bldg., Los Angeles. Cost of work has been variously estimated from $800,000 to $1,500,000.

MISCELLANEOUS

Proposed Work

Transmission Line—Milford, Me.—Bangor Ry. & Electric Co. plans to extend transmission line from Milford to Lincoln, about 33 mi., and from Somerville to Southwest Harbor, about 12 mi. E. M. Graham, 84 Harlow St., Bangor, ch. engr.

★Dam—New Brunswick, N. J.—City let contract for concrete dam involving 1200 cu.yd. concrete and 3 30-in. sluice gates to B. G. Coon Constr. Co., Luzerne, Pa.

Bulkhead, etc.—Stone Harbor, N. J.—Council to sell $13,500 bonds Aug. 7 for new bulkhead and improvements at Berkely Point, jetties at great channel and repairs to municipal pier. C. P. Bower, chn.

Transmission Line—Munhall, Pa.—Carnegie Steel Co., Carnegie Bldg., Pittsburgh, plans to build electric transmission line from Munhall to Rankin to connect Homestead steel works and Carrie furnaces.

Incinerating Plant — Sharpsville, Pa.—Sewer Com. preparing plans.

Dam—Yorkhaven, Pa.—Yorkhaven Water & Power Co. will build dam over eastern channel of Susquehanna River by day labor under supervision of R. W. Robinson, engr., Roundbottom, Va.

Transmission Line — Norton, Va. — Old Dominion Power Co. plans to build 25-mi. transmission line from Norton to St. Paul and Tom's Creek to supply coal operating companies.

Transmission Lines—Fairmont, W. Va.—Monongahela Valley Traction Co. made surveys for 30-mi. electric transmission lines to furnish energy to various coal mines; a mine 20 mi. long will extend from Ocean Mine near Clarksburg via Bridgeport, Rosemont, Flemington, Astor and to Galloway to supply Simpson Creek Coal Co. and other companies, also line from Riverside toward Morganstown to supply Lehigh Mines, operated by Jamison Coal & Coke Co. and mines of South Pittsburgh Coal Co. and Antler Coal Co., 10 mi. long. E. B. Moore, Fairmont, ch. engr.

Levee Work—Vicksburg, Miss.—Warren, Yazoo, Holmes, Issaquena and Sharkey Cos. plan new levee to protect 1,000,000 acres fertile land. Greenville Levee Bd. to appropriate $200,000 toward cost, Clarksdale Dist. like amount and Federal Government, $800,000. Address Co. Clk., Vicksburg.

Breakwater—Kenosha, Wis.—Council appropriated $45,000 to build breakwater from Garfield St. to Eichelman Park. B. C. Brennan, city engr.

Levee Work—Muscatine, Ia.—(Official)—Muscatine and Louisa Cos. retained Elliott & Harman Engr. Co., 144 Fredonia Ave., Peoria, Ill., to prepare plans for 3 mi. levee work along Mississippi River.

Incinerator — Oklahoma, Okla. — City plans election to vote on bonds to build incinerator. G. V. McClure, city engr.

Dock — Georgetown, Wash. — King Co. Comrs. Seattle, having plans prepared for 60 x 600-ft. dock, near Georgetown. Humes, co. engr.

Elimination Grade Crossings—San Francisco, Cal.—See "Railways."

River Improvements—Santa Ana, Cal.—Fullerton-Orangethorpe Storm Water Protection Dist. plans to improve 24 mi. along river front, involving 147,000 cu.yd. embankment, 887 cu.yd. concrete, 55,475 lb. steel, 910 lin.ft. culvert. W. J. Renshaw, engr.

BIDS DESIRED

Incinerator—Brookline, Mass.—Until Aug. 8, by Public Works Bd. Health for incinerator on Hammond St.

Incinerator—(Official) — Paducah, Ky.—Until Aug. 25, by F. N. Burns, mayor, for 2 unit incinerator, 20 ton capacity in 1 hour operation. L. A. Washington, city engr. Noted July 26.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Tunnel Improvement—Boston, Mass.—B. L. Beal, secy. Boston Transit Comn., let contract 4100 sq.yd. ribbed tile on walls, etc. on Bway. and Andrews Sq. Sta. to Galassi Mosaic & Tile Co., South Ash St., $28,558. Noted July 26.

★Station Finish—New York, N. Y.—Pub. Ser. Comn. let contract for 34th St. and Times Sq. stations to A. W. King & Co., Inc., 81 East 125th St., $178,172.

★Subway—Pa., Phila.—(Official)—W. S. Twining, dir. dept. city transit, let contract 3 sections Delivery Loop Subway with work appurtenant thereto as follows: Contract No. 201, 203, 103, 204 to Keystone State Constr. Co., 704-709 Pennsylvania Bldg.; Contract No. 202 to Smith, Hauser & Mac Isaac, Inc., 18 East 41st St., New York City; Contract No. 104 to Phila. Subway Constr. Co., 712 Lincoln Bldg.

★Track Floor, etc.—Phila., Pa.—(Official)—Frankfort Elevated Ry. let contract No. 528 involving concrete track floor, floor drains and footwalks in Front St., Kensington Ave. and Frankford Ave. from Callowhill to Dyre St. (grouping contracts No. 526 and 527) to Keystone State Constr. Co., Penn. Bldg., Phila., $909,400. Noted July 12.

★Rip Rap—Richmond, Cal.—City let contract rip rap on inner harbor bulkhead to Healy-Tibbitts Constr. Co., San Francisco, $22,620.

Government Will Require Warehouses—A great number of warehouses at various points will have to be built by the Government very soon, according to a recent report in the Official Bulletin. These are mainly to be at ocean terminals to take care of the congestion of supplies across the Atlantic, although some of them probably will be at inland centers where railway communication permits the assembly of goods for further transportation to the ocean terminals. This work is in charge of the Storage Committee of the General Munitions Board, of which M. L. Cooke is chairman.

This committee is endeavoring to introduce system into distribution methods in an effort to eliminate congestion, delay and double haulage, factors that seriously embarrass transportation systems in European countries engaged in the world war. Its aim is to simplify assemblage and storage of supplies required by the army or otherwise necessary to the prosecution of the war. In addition to the construction of warehouses, the committee will urge upon manufacturers the advisability of storage at the point of fabrication, where they will wait requisition for forwarding. It is proposed to establish points of local assembling at which goods in less than carload lots will be temporarily stored and full carloads made up for shipment.

Vancouver To Have New Shipyard—The Griswold-O'Donnell Co., of Portland, Ore., is the latest shipbuilding firm to be organized, and it will erect a plant on the waterfront at Vancouver to have four ways. Plans for machinery to accommodate eight ways have been completed, and the second unit will likely be put in shortly. Room is also leased for a sawmill to accompany the yard.

CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 51-55 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Aug. 13.	Red Rock, Okla	Aug. 2
Aug. 16.	Waterloo, Ia.	July 26
Aug. 16.	Kentland, Ind.	Aug. 9
Aug. 20.	Cumberland, Md. Advertised Aug. 2 and Aug. 9.	Aug. 9
Aug. 20.	Chicago Heights, Ill.	Aug. 9
Aug. 25.	San Francisco, Cali	Aug. 2
Sept. 4.	Cumberland, Md. Adv. Aug. 9.	Aug. 9
Sept. 11.	New York, N. Y.	July 12

SEWERS

Bids Close		See Eng. News-Record
Aug. 10.	Cashton, Wis.	Aug. 9
Aug. 10.	Abington, Va.	Aug. 9
Aug. 14.	Lebanon, O.	July 26
Aug. 14.	Toronto, Ont.	Aug. 2
Aug. 14.	Salt Lake City, Utah	Aug. 9
Aug. 14.	Escanaba, Mich.	Aug. 9
Aug. 15.	Kings Park, N. Y. Adv. Aug. 9.	Aug. 9
Aug. 20.	New Hampton, N. Y.	Aug. 9
Aug. 20.	Milford, Ia.	Aug. 9
Sept. 4.	Cumberland, Md. Adv. Aug. 9.	Aug. 9

BRIDGES

Bids Close		See Eng. News-Record
Aug. 14.	Somis, Cal.	Aug. 2
Aug. 14.	Tekamah, Neb.	Aug. 9
Aug. 14.	Waterbury, Conn.	Aug. 9
Aug. 14.	Tipton, Ia.	Aug. 9
Aug. 15.	New Ulm, Minn.	Aug. 9
Sept. 15.	Anderson, Ind.	Aug. 9
Aug. 15.	Reading, Pa.	Aug. 9
Aug. 16.	Salem, N. J.	Aug. 2
Aug. 20.	Angola, Ind.	Aug. 9
Aug. 22.	Troy, O.	Aug. 2
Aug. 25.	Martinsburg, W. Va.	Aug. 9
Aug. 27.	Elberton, Ga.	Aug. 2
Aug. 30.	Kankakee, Ill.	Aug. 2

STRUCTURAL STEEL WORK

Bids Close		See Eng. News-Record
Aug. 14.	Brazil, Ind.	July 12
Aug. 14.	Fairmont, W. Va.	July 26
Aug. 16.	Hamlin, W. Va.	July 12
Aug. 21.	Albany, N. Y. Adv. July 26 and Aug. 2.	July 26

REINFORCED CONCRETE

Bids Close		See Eng. News-Record
Aug. 13.	Spencer, W. Va.	July 19
Aug. 22.	Beatrice, Neb.	July 19

STREETS AND ROADS

Bids Close		See Eng. News-Record
Aug. 13.	Lewiston, Idaho	May 24
Aug. 13.	Ashland, Ala.	July 26
Aug. 13.	Indiana	July 26
Aug. 13.	Centerburg, O.	July 26
Aug. 13.	Plattsmouth, Neb.	Aug. 2
Aug. 13.	Cincinnati, O.	Aug. 2
Aug. 13.	Sandusky, O.	Aug. 2
Aug. 13.	Brownsville, Pa.	Aug. 9
Aug. 13.	Andalusia, Ala.	Aug. 9
Aug. 13.	Jacksonville, Ill.	Aug. 9
Aug. 13.	Danville, Ky.	Aug. 9
Aug. 13.	Peoria, Ill.	Aug. 9
Aug. 13.	Wheeling, W. Va.	Aug. 9
Aug. 13.	Indianapolis, Ind.	Aug. 9
Aug. 14.	New Bedford, N. J.	July 19
Aug. 14.	Pennsylvania Adv. July 26 and Aug. 9.	July 26
Aug. 14.	Freehold, N. J.	Aug. 2
Aug. 14.	St. Louis, Mo.	Aug. 2
Aug. 14.	Salt Lake City, Utah	Aug. 2
Aug. 14.	Tampa, Fla.	Aug. 2
Aug. 14.	Montclair, N. J.	Aug. 9
Aug. 14.	Massachusetts	Aug. 9
Aug. 14.	Delaware	Aug. 9
Aug. 15.	Canton, O.	Aug. 2
Aug. 15.	Ohio	Aug. 2
Aug. 15.	Medina, O.	Aug. 2
Aug. 15.	Pioneer, O.	Aug. 2
Aug. 15.	Sand Springs, Okla.	Aug. 9
Aug. 15.	Brooklyn, N. Y.	Aug. 9
Aug. 15.	Rhode Island Adv. Aug. 9.	Aug. 9
Aug. 15.	Indianapolis, Ind.	Aug. 9
Aug. 15.	Montezuma, Ga.	Aug. 9
Aug. 16.	Hamlin, W. Va.	July 12
Aug. 16.	Ohio	Aug. 2
Aug. 16.	Savannah, Tenn.	Aug. 2
Aug. 16.	Hazards, Ky.	Aug. 2
Aug. 16.	Colorado	Aug. 9
Aug. 16.	Santa Barbara, Cal.	Aug. 9
Aug. 17.	Jenkins, Ky.	Aug. 2
Aug. 17.	Cincinnati, O.	Aug. 2
Aug. 17.	Somerville, N. J.	Aug. 9
Aug. 18.	Walla Walla, Wash.	Aug. 9
Aug. 18.	Allegan, Mich.	Aug. 9
Aug. 20.	Indiana	July 26
Aug. 20.	Washington	Aug. 2
Aug. 20.	Dubuque, Ia.	Aug. 9
Aug. 20.	St. Paul, Minn.	Aug. 9
Aug. 20.	California	Aug. 9
Aug. 20.	Nebraska City, Neb.	Aug. 9
Aug. 20.	Salmon, Idaho	Aug. 9
Aug. 21.	Stone Harbor, N. J.	Aug. 2
Aug. 21.	Billings, Mont.	Aug. 9
Aug. 21.	Seattle, Wash.	Aug. 9
Aug. 21.	Jersey City, N. J.	Aug. 9
Aug. 23.	Fulton, N. Y. Adv. Aug. 9.	Aug. 9
Aug. 24.	Pennsylvania	Aug. 9
Aug. 24.	Uniontown, Pa.	Aug. 9
Aug. 27.	Newark, N. J.	Aug. 2
Aug. 27.	Portland, Me.	Aug. 9
Aug. 30.	Oklahoma, Okla.	Aug. 9

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Aug. 11.	Madison, Minn.	Aug. 9
Aug. 13.	Sibley, Ia.	Aug. 9
Aug. 16.	Emmetsburg, Ia.	Aug. 9
Aug. 17.	Fairbault, Minn.	Aug. 2
Aug. 18.	Sullivan, Ill.	Aug. 9
Aug. 20.	Des Moines, Ia.	July 26
Aug. 20.	Owatonna, Minn.	Aug. 9
Aug. 21.	Parton, Ill.	Aug. 9
Aug. 24.	Memphis, Tenn.	Aug. 2
Oct. 2.	St. Cloud, Minn.	Aug. 2

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Aug. 20.	New Hampton, N. Y.	Aug. 9

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 13.	Winnfield, La.	Aug. 2
Aug. 13.	Mason City, Ia.	July 26
Aug. 13.	Nashua, N. H.	Aug. 9
Aug. 13.	Aberdeen, S. D.	Aug. 9
Aug. 13.	Evansville, Ind.	Aug. 9
Aug. 14.	Washington, D. C.	Aug. 9
Aug. 14.	Landsdowne, Pa.	Aug. 9
Aug. 15.	Tower, Minn.	Aug. 2
Aug. 15.	Hudson Falls, N. Y.	Aug. 2
Aug. 15.	Burnaby, B. C.	Aug. 2
Aug. 15.	Holmesburg, Pa.	Aug. 9
Aug. 16.	Raleigh, N. C.	Aug. 9
Aug. 17.	Boston, Mass.	Aug. 9
Aug. 17.	Cohoes, N. Y.	July 26
Aug. 20.	Troy, N. Y.	July 12
Aug. 20.	Topeka, Kans.	Aug. 9
Aug. 20.	Kansas City, Mo.	Aug. 9
Aug. 20.	Brooklyn, N. Y.	Aug. 9
Aug. 22.	Mattapan, Mass.	Aug. 9
Aug. 22.	Greensboro, N. C.	July 26
Aug. 22.	Modesto, Cal.	Aug. 2
Aug. 24.	New Brunswick, N. J.	July 26
Aug. 28.	Detroit, Mich.	Aug. 2
Sept. 1.	Elmira, N. Y.	Aug. 9
Sept. 1.	Milwaukee, Wis.	Aug. 9
Sept. 15.	Spirit Lake, Ia.	Aug. 9

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Aug. 6.	Globe, Ariz.	July 5
Aug. 6.	Charleston, S. C.	July 26
Aug. 11.	St. Louis, Mo.	July 26
Aug. 13.	Ft. Mifflin, Penn.	Aug. 2
Aug. 13.	New York, N. Y.	Aug. 9
Aug. 14.	West Point, Ga.	July 12
Aug. 17.	Washington, D. C.	July 12
Aug. 20.	GGlenwood Springs, Colo.	Aug. 2
Aug. 20.	Washington, D. C.	Aug. 2
Aug. 20.	Phila., Pa.	Aug. 9
Aug. 20.	New London, Conn.	Aug. 9
Aug. 20.	Port Royal, S. C.	Aug. 9
Aug. 21.	Grand Haven, Mich. Adv. July 26 and Aug. 2.	July 26
Aug. 24.	Memphis, Tenn.	Aug. 9
Aug. 25.	Charleston, S. C.	Aug. 9
Aug. 27.	Hingham, Mass.	Aug. 9
Aug. 27.	Washington, D. C.	Aug. 9
Aug. 28.	Detroit, Mich.	Aug. 2
Aug. 29.	Glenwood Springs, Colo.	Aug. 9
Aug. 30.	Franklin, Pa. Adv. July 26 and Aug. 2.	July 26
Sept. 3.	Kuahua, T. H.	Aug. 9
Sept. 4.	McKees Rock, Pa.	Aug. 9
Sept. 4.	Detroit, Mich. Adv. Aug. 9.	Aug. 9
Sept. 5.	Torrington, Wyo. Adv. July 26.	July 26
Sept. 5.	Washington, Ga.	Aug. 2
Sept. 5.	San Francisco, Cal. Adv. Aug. 9.	Aug. 9
Sept. 6.	Forsyth, Ga.	Aug. 2
Sept. 12.	Long Island City, N. Y.	Aug. 9

MISCELLANEOUS

Bids Close		See Eng. News-Record
Aug. 6.	Air Compressors—Galesburg, Ill. Adv. July 26 and Aug. 2.	July 26
Aug. 8.	Incinerator—Brookline, Mass.	Aug. 2

Aug. 13. Timber Bulkhead—Albany, N. Y. ....Aug. 9
Adv. Aug. 9.
Aug. 14. Twin Falls, Idaho ....Aug. 9
Aug. 16. Dam—Buffalo, N. Y......Aug. 9
Aug. 21. Piers—Albany, N. Y. ....July 26
Adv. July 26 and Aug. 2.
Aug. 22. Tunnels—San Francisco, Cal. ....July 19
Adv. July 19 and Aug. 9.
Aug. 25. Incinerator—Paducah, Ky. Aug. 2

Where name of official is not given, inquiries should be addressed to City Clerk County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., Lockport—City had plans prepared building storage reservoir containing 56,000-000 gal. About $165,000. J. F. Frehsee, city engr.

Fla., Leesburg—City election soon to vote on $40,000 bond issue to build water-works system and electric-light plant. Address Mayor.

Fla., Orlando—City plans to build water and electric light plant. F. N. Williams, clk.

Miss., Moorhead — City voted $10,000 bond issue to construct waterworks system. W. E. Stevenson, mayor.

La., Pineville—City plans water-works system. Address City Clk.

Tenn., Trezevant—City defeated $125,000 bond issue to extend and improve water-works system. Noted June 22.

O., Bluffton—Village to sell $35,000 bonds to build waterworks and electric light system.

O., Hamilton—City to sell $10,000 bonds to improve water-works system. S. D. Nelson, city supt.

Mich., Pontiac—City sold $65,000 bonds to improve and extend waterworks system; this is part of $275,000 bond issue voted. H. L. Weaver, city supt.

Ia., Carroll—City plans to extend water-works. Address City Clk.

Kan., Elkhart—City voted $10,000 bonds to extend water-works system.

S. D., Spencer—City plans to build water-works and sewerage systems.

Mont., Scobey—City voted $19,000 bonds to build waterworks system.

Mo., Monett—City having plans prepared building reservoir, 1,000,000 gal. capacity. About $10,000.

Tex., Mineral Wells — (Official) — City voted $150,000 bonds to build water supply system, including 100,000 cu.yd. fill for dam, 10,000 cu.yd. concrete for spillway and filters, new pumping station and 4½-mi. pipe line. W. W. McClendon, city engr. Noted July 26.

Okla., Norman—City voted $10,000 bonds to construct reservoir and pump house. Noted Aug. 2.

Okla., Okmulgee—City election Sept. 15 to vote on $53,000 bonds to build water-works. Address City Clk. Noted July 5.

Okla., Shattuck—City plans to improve water-works. B. Jenning, city engr.

Nev., Elko—City plans to build rein.-con. reservoir, 2,000,000 gal. capacity. T. J. Critchley, city supt.

BIDS DESIRED

N. Y., New Hampton—See "Sewers."

Md., Cumberland—(Official)—Until Sept. 4, by A. W. Straub, city clk., furnishing and laying c. i. water mains and building outlet tunnel. R. L. Rizer, city engr. Advertised in this issue.

Ind., Kentlands—(Official) — Until Aug. 16, by Bd. Trustees, Council Chamber, building rein.-con. tower and tank, 800,000 gal. capacity. Address C. A. Rinard.

Ill., Chicago Heights—Until Aug. 20 by O. W. Ritter, city clk., drilling deep well.

N. D., Goodrich—(Official)—Until Aug. 31, by T. R. Atkinson, engr., Bismarck, for waterworks system.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—Dept. Pub. Wks. let contract laying water pipes Brookline Ave., Roxbury, to T. Costello & Co., 20 Fenwood Rd., Roxbury, $18,105.

★S. C., Columbia—City let contract, water mains, sewage and electrical wiring, military cantonment, to Walker Electric & Plumbing Co., Columbus, Ga., $500,000.

★Ga., Macon—City let contract laying c.-i. and wood pipe line of from 14 to 20 in. to Camp Wheeler, and building concrete reservoir, 600,000 gal. near camp, to H. B. Hoppenditzel, $18,389.

O., Dayton—City received low bid building 10,000,000 gal. reservoir in southeastern part of city, from J. L. Geiger, Dayton, $160,000. Noted Aug. 2.

★N. D., Lakoton — City let contract, water-works and sewerage system, to Haggard Construction Co., Fargo, $80,012.

Wash., Seattle—Bd. Pub. Wks. received low bids building 50,000 gal. pumping plant at Maple Leaf reservoir, including water tank and steel tower, from Swenson & Co., Arcade Bldg., $18,804; E. G. Peters, Oriental Bldg., $24,519. Noted June 21.

SEWERS

Proposed Work

N. J., Hightstown—Boro. plans to install new sewage disposal plant.

Pa., Coatesville — City had plans prepared by A. Potter, engr., Coatesville, building sewerage system and disposal plant. About $350,000.

Pa., Sharon—City soon lets contract, Pine Hollow sanitary sewer, 5000-ft., 24-in. pipe. G. Nicholls, city engr.

Tenn., Mt. Vernon—City plans to extend sewerage system involving laying 3½ mi. pipe. O. E. Mauer, clk.

Ky., Owensboro—City to sell $25,000 of $225,000 sewer bonds recently issued. H. Talbother, city engr. Noted July 5.

O., Cleveland—City rejected bids installing sewers portion East 171st St. R. Hoffman, city engr. Noted July 12.

O., Lorain—City plans sanitary sewer in portions Park View Ave. O. M. McCahon, clk. C. M. Osborn, city engr.

O., Rocky River—(Official)—Village to sell $50,000 bonds Sept. 4 to build sewage disposal plant, flushing tunnel, etc. F. Mitchell, clk.

O., Salem—City plans to rebuild sewage disposal plant. About $200,000. B. M. French, city engr.

O., Waynesburg — See "Streets and Roads."

Mich., Grand Rapids—City to sell $250,-000 bonds to construct sewage disposal plant; this is first step in the construction undertaken. W. S. Moore, city engr.

Wis., Burlington—City to sell $13,000 bonds to construct sewers in Perkins Park and in East side of river.

Wis., Milwaukee—City having plans prepared by T. C. Hatton, engr. sewerage comn., sewage disposal plant, Jones Island. About $15,000,000. G. Staal, city engr.

Ia., Creston—City sold $30,000 bonds to construct sewerage system. T. S. DeLay, city engr.

Ia., Pella—City had plans prepared by I. J. Stoddard, engr., to build storm sewerage system. About $15,420.

Kan., Larned—City plans sewage disposal plant. Black & Veatch, 507 Interstate Bldg., Kansas City, Mo., engrs.

Kan., Wichita—City having plans prepared installing sewer mains in Hydraulic Ave., to furnish district lying between drainage canal and river with complete sewerage system. A. Brockway city engr.

Neb., Wayne—(Official) — City defeated $30,000 bord issue to construct storm sewers. J. M. Cherry, clk. Noted July 26.

Wyo., Cheyenne—City defeated $60,000 bond issue to install storm sewers. E. W. Glakeke, city engr. Noted June 7.

Tex., San Antonio—City plans to build sewage pumping plant, Sherman St. to operate sewer system at Camp Travis. H. Helland, city engr.

Tex., Victoria—City plans building storm sewer in 11 blocks consisting of Williams, Liberty, Main and other streets. W. Wheeler, city supt.

Okla., Altus—City soon lets contract addition sewerage system. About $15,000, also paving portions South Main St.

Okla., Bristow—City election Aug. 15th, to vote on bond issue to improve sewerage system. T. B. Gibson, city clk.

Ariz., Glandale — Town voted $50,000 bonds to construct sewerage system.

Wash., Seattle—City had plans prepared sewers, 43rd Ave., N. E. About $15,835. A. H. Dimock, city engr.

Cal., Bishop—City having plans prepared by B. E. Sherwin for sewer extensions. About $35,000.

Ont., St. Catharines—City soon lets contract building next section relief sewer. Dufferin and Maple Sts., also extending relief sewer in Carlton St. W. P. Near, city engr.

Ont., St. Thomas—City plans to construct storm sewers. About $75,000.

Cal., Santa Barbara—City plans extensions to sewerage system including 9400 ft. of from 10- to 33-in. pipe, Imhoff tank, etc. About $85,000. A. B. Cook, city engr.

BIDS DESIRED

N. Y., Kings Park—(Official)—Until Aug. 15 by State Hospital Comn., extending sewage disposal plant, Kings Park State Hospital. E. S. Elwood, secy. Advertised in this issue.

N. Y., New Hampton—Until Aug. 20 by B. G. Lewis, comr. of Correction, installing drainage and water supply of power house and connecting tunnels of New York City reformatory.

N. J., Newark—Until Aug. 9, by St. & Water Comrs., building sewers in Wheeler Rd., Ferdon, South 20th and Miller Sts. M. R. Sherrard, city engr.

Md., Cumberland—(Official)—Until Sept. 4, by A. W. Straub, city clk., building sanitary sewers, Boulevard and Mary St. R. L. Rizer, city engr. Advertised in this issue.

Va., Abington—Until Aug. 10, by City, constructing sewerage system; work involves 37,034 ft. of from 6- to 12-in. salt-glazed vitr. clay pipe. R. Gray, Bristol, engr. Noted Apr. 26.

Mich., Escanaga—Until Aug. 14, by City, 5 sanitary sewers. M. J. Hodson, city engr. Noted July 12.

Wis., Cashton—Until Aug. 10, by P. J. Hegge, village clk., constructing sewage disposal plant, 1200 ft., together with suitable appurtenances. W. S. Woods, La Crosse, engr.

Ia., Milford—(Official)—Until Aug. 20, by J. E. Shelledy, city clk., 4½-mi. 8 15-in. sanitary sewer. C. P. Chase, Clinton, engr.

Utah, Salt Lake City—(Official)—Until Aug. 14 by G. Snow, city recorder, constructing pipe sewers, Sewer Extension No. 374, portions 3rd and 4th Aves.

Cal., Santa Barbara—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I., Pawtucket—Bd. Pub. Wks. let contract, sewer in portions Mineral Spring and Smithfield Aves. to E. B. Roberts Constr. Co., Pittsfield, Mass., $20,000.

N. Y., New York — (Official) — M. M. Marks, boro. pres., received low bids (a) repairing barrel sewers Ft. Vestry St., and North River, Pier 29, (b) foot Duane St. and North River, Pier 21, from Lawrence Contr. Co., 2409 Walton Ave., (a) $13,388 (b) $14,502; Riverside Contr. Co., 39 Cortlandt St. (a) $14,762; (b) $13,732; Melrose Constr. Co., 147 West 125th St., (a) $17,382; (b) $15,829.

★N. Y., Wingdale—Comn. on New York Prisons, Room 615 Hall of Records, New York City, let contract sewage disposal plant at Wingdale Prison to New York Sewage Disposal Co., 37 East 28th St., New York City, $37,769. Noted June 28.

★Pa., Dorranceton—See "Streets and Roads."

★O., Cleveland—Bd. Control let contract building "takeout" pipes East 140th St. sewage disposal plant to Amer. Constr. Co., 1552 Rockefeller Bldg., $360,700.

★O., Cleveland—City let contract, sewer in portion West 59th St. to Manson Co., 120 Engineers Bldg., $12,625, drainage sewer around public hall site to Hoag & Dall, 510 Court Bldg. About $98,728.

Sewers (Continued)

★**O., Cleveland**—Bd. Control let contract installing sewers East 116th to Brookside Constr. Co., $12,686; Corlett Ave. to Randall & Cooper, $43,077; Tampa Ave. to Amata Constr. Co., 1108 Engineers Bldg., $4450. Noted July 12.

★**Ind., Garrett**—City let contract building Walsh St. sewer to C. Weis, Peru, $22,881.

★**Wis., La Crosse**—(Official)—City let contract building sewers to Hill, Manning, Whalen Co., 512 State St., $67,487.

★**Wis., Neenah**—(Official)—Bd. Pub. Wks. let contract installing 5300 lin.ft. sanitary sewers to Kispert & Hendricks, Kaukauna, $10,558.

★**Ia., Farley**—City let contract sewerage system to O. Kvingle, Dubuque, $15,563; also disposal plant to M. Tschivgi, Cedar Rapids, $7700.

★**Minn., Crosby**—Village let contract sewer in central addition to Pastoret Constr. Co., Duluth, $12,267. Noted July 12.

★**Kan., Augusta**—City let contract, sewers in Dists. Nos. 2 and 3 to McCoy & Taylor, Emporia, $33,623.

★**N. D., Drake**—City let contract installing sewerage and waterworks systems to Badger Constr. Co., Drake, $80,000.

★**N. D., Lakoton**—See "Water-works."

★**Mo., Ada**—City let contract, sewer, to D. Tolbert, Muskogee, $24,100.

★**Okla., Claremore**—City let contract laying 8-in. sewer main, 6-in. laterals, in sewer dists. 12, 13, 14 and 15 to Municipal Excavating Co., Oklahoma, $11,000.

★**Okla., Frederick**—City let contract sewers portions Grand Ave., 10th and 11th Sts., to Vibrolithic Constr. Co., $18,681.

★**Ore., Astoria**—See "Streets and Roads."

★**Wash., Seattle**—Bd. Pub. Wks. let contract, sewers in West and North 45th St. to Fiorito Bros., 1630 25th Ave., $18,119.

★**Wash., Seattle**—Bd. Pub. Wks. let contract installing clay pipe sewers 11th Ave., N. W., to Fiorito Bros., Seattle, $12,495.

BRIDGES

Proposed Work

N. Y., Watertown—New York Central R.R. and City plans to build double-deck bridge at Court St. G. W. Kittredge, Grand Central Terminal, New York City, ch. engr. R.R. E. W. Sayles, city engr.

Pa., Emaus—Philadelphia & Reading Ry. having plans prepared by A. L. Carhart, engr., for rein.-con. bridge. S. T. Wagner, Phila., ch. engr.

Pa., Reading—Berks Co. plans to build rein.-con. bridge over Monocacy Creek, ½ mi. south of Baumstown.

O., Dayton—City plans to build 2 span steel bridge over Wolf Creek, earth filled approaches, spans 233 ft. and 50 ft. long. F. O. Eichelberger, city engr.

O., Niles—Trumbull Co., Westhersfield Twp. voted $120,000 bonds to build 382-ft. bridge involving 4000 yd. concrete over Mahoning River to connect Niles and McDonald. Noted June 28.

Ia., Sac City—Bd. Supervs. Sac Co. plans to spend $20,000 to build bridges.

Ia., Waukon—Allamakee Co. sold $116,000 bonds to build bridges.

Minn., Duluth—St. Louis Co. prepared plans for rein.-con. bridge over St. Louis River. About $100,000.

Mo., Charleston—See "Streets and Roads."

Mo., Osceola—See "Streets and Roads."

Okla., Ada.—See "Streets and Roads."

Okla., Ardmore—See "Streets and Roads."

Okla., Atoka—Atoka Co. election Aug. 25, to vote on $30,000 bonds to build bridges.

Okla., Chickasha—Grady Co. Comrs. appropriated $20,000 to build bridge over Canadian River.

Okla., Sapula—Creek Co. Comrs. plan to build 2 rein.-con. bridges between Kelleyville and Bristow. About $65,000.

Okla., Stroud—See "Streets and Roads."

Wash., Olympia—City soon receives bids for rein.-con. bridge over Des Chutes River, 4th St. About $150,000.

Cal., Los Angeles—Bd. Supervs. Los Angeles Co. appropriated $35,000 to build Sanford bridge over east branch Los Angeles River, near Rivera: $37,000 for Old Mission bridge on San Gabriel Blvd., near Whittier, $15,000 for Verdugo Wash bridge, Glendale; $5000 for Ivanhoe bridge over Los Angeles River between Glendale and Los Angeles.

BIDS DESIRED

Conn., Waterbury—Until Aug. 14, by City, building 3-span rein.-con. bridge over Naugatuck River at West Main St. About $100,000. R. A. Cairns, city engr. Noted Apr. 26.

Pa., Reading—Until Aug. 15, by W. H. Dechant & Sons, engrs., Baer Bldg., building bridge over Schuylkill River for Carpenter Steel Co.

W. Va., Martinsburg—Until Aug. 25, by Berkeley Co., building 100-ft rein.-con span over Opequon Creek.

Ind., Anderson—Until Sept. 15, by Madison Co. Comrs., building 100-ft. bridge over Sugar Fork, Adams Twp.

Ind., Angola—Until Aug. 20, by Steuben Co. Comrs., building 2 rein.-con. bridges and lengthening 1 concrete bridge.

Ia., Tipton—Until Aug. 14, by Cedar Co. building 35 rein.-con. culverts and 1 I-beam bridge, concrete floor and abutments. About $16,300. A. C. Yetter, aud.

Minn., New Ulm—Until Aug. 15, by Brown Co., building 1 60-ft. steel truss bridge over Little Cottonwood River. L. G. Vogel, aud.

Minn., Warren—Until Aug. 14, by Marshall Co. building 4 highway bridges and 2 rein.-con. culverts. A. G. Ludgren, aud.

Neb., Tekamah—Until Aug. 14, by City building rein.-con. highway bridge and retaining walls. A. C. Arend, Brandeis Bldg., Omaha, engr.

Cal., Ventura—Until Aug. 14, by J. B. McCloskey, Ventura Co. aud., building bridge near Somis, involving 100 cu.yd. concrete, 7640 lb. reinforcing steel.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Dedham—See "Streets and Roads."

★**N. Y., Buffalo**—See "Industrials."

★**Fla., West Palm Beach**—See "Excavation and Dredging."

★**O., Youngstown**—See "Railways."

★**Ark., Little Rock**—Pulaski Co. Bridge Com. let contract repairing free bridge to Missouri Valley Bridge & Iron Co., Leavensworth, Kan., $38,000.

★**Cal., Marysville**—Yuba Co. let contract 3 Creps bridges in Superv. Nutt's Dist. to Jenkins & Wells, 3530 York Ave., Sacramento, $17,671.

STRUCTURAL STEEL WORK

Proposed Work

O., Dayton—See "Bridges."

Okla., Ardmore—See "Streets and Roads."

BIDS DESIRED

Minn., New Ulm—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**O., Cleveland**—See "Industrials."

REINFORCED CONCRETE

Proposed Work

Pa., Emaus—See "Bridges."

Pa., Reading—See "Bridges."

O., Cleveland—See "Buildings."

O., Niles—See "Bridges."

Minn., Duluth—See "Bridges."

Okla., Ardmore—See "Streets and Roads."

Okla., Sapulpa—See "Bridges."

Cal., Huntington Beach—See "Miscellaneous."

Ont., Amhertsburg—See "Miscellaneous."

BIDS DESIRED

Conn., Waterbury—See "Bridges."

N. Y., Buffalo—See "Miscellaneous."

W. Va., Martinsburg—See "Bridges."

Ind., Angola—See "Bridges."

Ind., Kentland—See "Waterworks."

Ia., Tipton—See "Bridges."

Minn., Warren—See "Bridges."

Nev., Elko—See "Waterworks."

Cal., Ventura—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Ark., Ft. Smith**—See "Industrial."

★**Ore., Portland**—See "Buildings."

STREETS AND ROADS

Proposed Work

Mass., Peabody—City to sell $50,000 bonds to pave streets. F. Emerson, city engr.

N. Y., Albany—State Highway Comn. plans to build Gateway Blvd. from Buffalo to Pennsylvania state line. Chautauqua Co. to bear part of cost. E. Duffey, comr.

N. Y., Long Island City—Boro plans to pave portion Jamaica Ave., $100,000.

New Jersey—State Highway Dept., Trenton, appropriated $65,000 for road work in Mercer Co. Address, Bd. Freeholders, Trenton.

N. J., Collingswood—Council voted $120,000 bond issue to repave Haddon Ave. and other streets. Address D. S. Rash. Noted July 19.

N. J., East Orange—City Council to sell $18,000 bonds, Aug. 13, for paving Harrison St. W. D. Willegerod, city engr.

N. J., Gladstone—Town plans to improve road from here to Pottersville. About $10,000.

N. J., Lyndhurst—Town plans to expend $14,356 to pave streets.

N. J., Montclair—Town Court declared void contract let to Standard Bitulithic Co., 31 Clinton St., Newark Paving Park St. and Bellevue Ave., $269,560. New bids soon. Noted July 26.

N. J., Newton—Sussex Co. Bd. Freeholders plans to pave Springdale-Tranquility Rd., macadam.

N. J., Trenton—Bd. Freeholders Mercer Co. plan to build road from Sullivan Way to River Rd., boulevard style. About $10,000. F. McCullough, clk.

N. J., Union—Town election soon to vote on $54,000 bond issue to repair streets.

Pennsylvania—State Highway Dept., Harrisburg, received no bid paving Monaca-Aliquippa Rd., vitr. block and waterbound macadam. New bids soon. F. H. Black, state highway engr. Noted July 12.

Pennsylvania—State Highway Comn., Harrisburg, authorized surveys building new highways in Westmoreland Co. Roads to be built jointly with county officials. Address Co. Comrs., Greensburg.

W. Va., Claredon—Alexandria Co. prepared plans improving Rosslyn-Cherrydale Rd. About $35,000 available.

W. Va., Parkersburg—City plans paving Spring, and many other streets, brick. About $46,000. T. L. Higgs, city engr.

W. Va., Wheeling—Ohio Co. soon lets contract building concrete road between Atkinson's crossing and Pennsylvania line.

W. Va., Wheeling—City had plans prepared for improving streets. About $125,000. C. B. Cooke, city engr. Noted July 26.

N. C., Smithfield—Town plans to pave 7 blocks; also building sidewalks. About $10,000.

Ala., Anniston—Calhoun Co. Comrs. plan to build highway from here to Bynum, 6 mi. About $25,000.

Ala., Gadsden—City sold $16,000 bonds to pave portion Chestnut St. E. Smith, city engr.

Miss., Liberty—Amite Co. Comrs. having plans prepared for building Prentiss Highway to 3rd Dist. About $50,000 available for work. F. J. Russell, engr.

Louisiana—State Highway Dept. plans to build road from Pineville to Camp Beauregard. About $25,000 per mile. D. Buie, New Orleans, state highway engr.

La., Cameron—Cameron Co., Hackberry Dist. plans to build road from Hackberry across Bayou Kelso and connecting Calcasie Co. highway. $13,000 bond issue voted.

La., Edgard—St. John Baptist Co. sold $180,000 bond issue to build roads. W. Lasseigne, clk. Noted July 12.

Tenn., Cleveland—City to sell $50,000 bond issue to pave 2½ mi. streets. S. D. Newton, Box 24, city engr. Noted May 10.

Tenn., Springfield—Robertson Co. Court to sell $50,000 bonds to improve pikes. Noted July 12.

Ky., Cadiz—Trigg Co. soon lets contract building 5½-mi. intercounty road between here and Princeton. G. W. Ryan, co. engr.

Ky., Clinton—Hickman Co. plans to build 6-mi. roads, bituminous surface.

O., Bryan—Williams Co. to sell $108,000 bonds Aug 17, to improve roads. G. C. Beucler, aud.

O., Cleveland—City plans to improve portions Lowell, East 49th, Wright, East 57th, West 58th, Hege, Stanhope, Pythias, Alcoba, West 73rd, West 70th, Mirlo and Franklin Sts. R. Hoffman, city engr.

Streets and Roads (Continued)

O., Columbus—City election Aug. 14 to vote on $500,000 bonds to improve streets. H. Maetzel, city engr. Noted June 21.

O., Dayton—City plans to pave West 5th St., from Perry to Wilkinson Sts., creosoted wood block, and from Perry to Great Miami bridge, brick; also building sidewalks on Lakeview Ave. F. O. Eichelberger, city engr.

O., Findlay—Hancock Co. Comrs. sold $46,000 bonds to improve roads.

O., Norwalk—Huron Co. to sell $31,500 bonds, Aug. 21, for improving I. C. G. No. 289, Lyne Twp. C. E. Bloomer, aud.

O., Ravenna—Portage Co. to sell Aug. 20, $75,000 bonds to improve I. C. H. No. 474, Mantua and Aurora Twps., Atwater-Limaville Rd., Atwater Twp. M. J. Kelley, co. aud.

O., Wapakoneta—Auglaize Co. sold $62,500 bonds to improve Wapakoneta Roundhead Rd.

O., Waynesburg — (Official) — Village to sell $16,840 bonds grading paving and building catch basins, storm sewer, etc. J. W. Elsass, clk.

O., Youngstown — Mahoning Co. sold $103,000 bonds to improve Youngstown-Conneaut I. C. H. No. 13, Monroe Sect. B. E. Brainard, clk.

Ind., Goshen—Elkhart Co. sold $14,000 bonds to improve Osolo Twp. highways.

Ind., Indianapolis—Marion Co. to sell $200,000 bonds Aug. 10th, to improve highways. L. K. Fesler, aud.

Ind., Lafayette—Tippecanoe Co. to sell $148,000 bonds Aug. 10 to improve highways. H. G. Leslie, treas.

Ill., Amboy—City plans to pave, curb and gutter Mason St., brick. F. W. Leake, engr.

Ill., North Chicago — City plans paving portions of 67 streets. About $120,000. M. J. Douthitt, city engr.

Ill., Pontiac—City plans to pave streets involving 3069 sq.yd. concrete, 14,722 sq.yd. monolithic and 13,345 ft. curb and gutter.

Ia., Des Moines—Bd. Supervs. Polk Co. rejected bids, 5-mi. highway from Des Moines to Camp Dodge. Noted July 5.

Ia., Des Moines—City plans to pave portion of 11th St. K. Kastberg, city engr.

Ia., Marion—Linn Co. plans to pave road between here and Cedar Rapids, 1½ mi. About $60,000.

Ia., Oskaloosa—City plans to improve A Ave. from 11th St. to city limits on the east.

Ia., Tama—City preparing plans paving 4 mi. streets.

Minn., Duluth—City plans paving portions Birch Ave., rein.-con. E. Ayers, engr.

Minn., Duluth—City plans to curb and gutter portion of 5th St. About $400,000. L. Ayers, city engr.

Kan., Columbus—Cherokee Co. soon lets contract grading and graveling about 10-mi. Blake Rd. C. M. Cooper, co. engr.

Kan., Concordia—Cloud Co. Comrs. plan to pave White Way between here and Clyde.

Kan., Great Bend—City soon lets contract paving William St. F. A. Moses, clk.

Kan., Wichita — City soon lets contract paving portions of Fairmont Ave. Address A. Brockway, city engr.

Neb., Lincoln—Lancaster Co. plans to pave portion O St. Rd., 6 mi. A. Edgren, co. engr.

Neb., Wayne—(Official)—Wayne Co. defeated $30,000 bond issue to pave streets and drain wet land. J. M. Cherry, clk. Noted July 26.

Montana—State Highway Comn., Helena, plans to build highway between Butte and Helena, 3 routes; main route from Butte to Basin and Boulder by way of Elk Park and thence to Helena; from Butte to Whitehall and from there to Boulder; from Deer Lodge over Priest pass route to Helena.

Mo., Carthage—Jasper Co. plans to build 7.4 mi. concrete road with state aid.

Mo., Charleston — Mississippi Co. voted $375,000 bonds to build highways and bridges. Noted June 14.

Mo., Jefferson City—Cole Co. plans to build 25.8 mi. rock and gravel road with state aid.

Mo., Joplin—City plans to resurface portions 5th, Wall, 3rd, Joplin, 4th Sts. and Virginia Ave., asphalt filler. J. J. McAffee, city engr.

Mo., Linn—Osage County voted $180,000 bond issue for improving roads in county.

Mo., Osceola—Bd. Supervs. St. Clair Co. sold $400,000 bond issue to grade roads and build bridges on State Rds. Noted June 28.

Mo., St. Joseph—(Official)—City passed ordinances for improving portions Savannah Ave., Edmond, Locust, Seneca and other streets by paving and building sidewalks. C. P. Hoff, city engr.

Mo., Sikeston—Scott Co. voted $750,000 bond issue to build 230 mi. hard roads. Noted July 5.

Mo., Warrensburg — Johnson Co. plans election to vote on $500,000 bond issue to improve roads. T. Hyatt, clk.

Arkansas—State Highway Comn., Little Rock, prepared plans building 47 mi. earth roads, Montgomery Co., cost, $26,357; 13 mi. gravel road, Arkansas Co., $93,007; 13 mi. bituminous gravel road, Lonoke Co., $141,582.

Ark., Newport—Jackson Co. Comrs. sold $250,000 bonds to build 52-mi. main line road and 8-mi. lateral roads in Rd. Dist. No. 2.

Ark., Pocahontas—Randolph Co. Comrs. having plans prepared for building 41-mi. new roads. About $248,000. Address C. F. Bode, O'Kean.

Ark., Russellville—City plans paving 16 blocks Main St., Dist. No. 1 and 1-mi. Oak St., Dist. No. 2.

Ark., Walnut Ridge — Lawrence Co. Comrs. had plans prepared 13-mi. road, macadam, from Lauratown north to Black Rock. About $80,268.

Tex., Canadian — Hemphill Co. defeated $150,000 bond issue to build roads. Noted June 21.

Tex., Sanford—City plans to spend $12,500 to pave streets.

Okla., Ada—Pontiac Co. election Aug. 20 (change of date) to vote on $523,000 bond issue to build roads and bridges. Noted July 12.

Okla., Ada—City having plans prepared by Benham Eng. Co., engrs., Colcord Bldg., Oklahoma, paving 8 blks., Dist. No. 5, asphaltic concrete. About $35,000.

Okla., Altus—See "Sewers."

Okla., Ardmore—Carter Co. preparing plans for 50 mi. hard surfaced roads, gravel or rock asphalt also steel and rein.-con. bridges. About $200,000. E. E. Gravelle, co. engr.

Okla., Sapulpa—Creek Co. Comrs. plan to spend $300,000 to build roads; plans include 15 mi. new road.

Okla., Stroud — City defeated $60,000 bonds to build roads and bridges. Noted June 7.

Idaho — State Highway Comn., Boise, plans paving portions N. and S., Sawtooth Park, Idaho and Pacific, and Yellowstone Park Highways with gravel.

Ariz., Kingman—Mohave Co. Bd. Superv. plans to expend $28,000 to build roads.

Ariz., Phoenix—City plans to pave portions East Moreland and Willetta Ave., concrete base, bitulithic surface. J. B. Girand, city engr.

Ore., Eugene—Lane Co. plans improving Cottage Grove Rd. with state aid. About $100,000.

California—State Highway Comn., Sacramento, rejected bids, paving 8.7-mi. state highway in Los Angeles Co. between point near Action and Palmdale, with concrete. Noted Aug. 2.

Cal., Los Angeles—Los Angeles Co. Rd. Comn. plans to complete harbor truck boulevard on Alameda St. from Slauson Ave. to Wilmington, 13.31 mi. concrete. About $365,107. F. H. Joyner, rd. comr.

Cal., Stockton—San Joaquin Co. election soon to vote on $150,000 bond issue to build and pave 55-mi. roads.

BIDS DESIRED

Me., Portland—(Official)—Until Aug. 27, by E. M. Hunt, comr. pub. wks., paving portions Congress St., 2580 sq.yd. split, redressed, granite block.

Massachusetts—(Official)—Until Aug. 14 by State Highway Comn., Boston, surfacing 3400 ft., Swansea; building highway, 2200 ft., Lynn, 3300 ft., West Springfield. W. D. Sohier, member.

Rhode Island—(Official)—Until Aug. 15, by State Bd. Pub. Rds., Providence, rebuilding 1.5 mi. state highway; advertised in this issue.

N. Y., Brooklyn—Until Aug. 15, by L. H. Pounds, boro. pres., Boro. Hall, regulating and paving permanent asphalt, 6-in. concrete base portion roadway Hegeman, Q, Sneider, 16th, 19th Aves., and West 29th St., regulating, grading, curbing, laying sidewalks, paving, preliminary asphalt block, portion roadway Narrows Ave., regulating and restoring pavement portion roadway Park and Tomkins Ave., regulating, grading, curbing and laying sidewalks, Q and Stone Aves., regulating, repaving permanent grade 1 granite, 6 in. concrete foundation, roadway Van Brunt St., 1st St., preliminary asphalt blocks.

N. Y., Fulton—(Official)—Until Aug. 23, by C. M. Allen, Jr., city clk., paving various streets; advertised in this issue.

N. J., Jersey City—(Offical)—Until Aug. 21 by Hudson Blvd. Comrs., building roadway between Central R.R. of New Jersey, near 8th St. to 36th St., Bayonne, rein.-con. J. C. Sweeney, clk. C. A. Van Kuren, city engr.

N. J., Montclair—(Official)—Until Aug. 14 by H. Trippett, town clk., paving portion Park St., warrenite, concrete curb; Bellevue Ave., warrenite, Hillside brick.

N. J., Somerville—Until Aug. 17, by Bd. Freeholders, improving portion Chimney Rock Rd. J. Dougherty, co. engr.

Pennsylvania—Until Aug. 24, by State Highway Dept., Harrisburg, building 5-mi. state highway from Morado to Lawrence Co. line.

Pa., Brownsville—(Official)—Until Aug. 13, by C. W. Coulter, boro. secy., improving Water St., involving 4800 cu.yd. excava., 4900 lin.ft. curbing and 5500 sq.yd. paving, vitr. block. L. G. Moslener, boro. engr.

Pa., Uniontown — (Official)—Until Aug. 24, by H. Kisinger, Fayette Co., controller, grading 19,000 cu.yd. River Rd., Brownsville Twp.

Delaware—Until Aug. 14, by State Highway Dept., Dover, building 5-mi. Lincoln Highway.

W. Va., Wheeling—(Official)—Until Aug. 13, by H. C. Underwood, clk. Ohio Co. bd. comrs., grading and building concrete road surface, portions National Rd., Steenrod and Mount de Chantal Rd. W. O. McCluskey, Jr., co. rd. engr.

Ala., Andalusia—Until Aug. 13 by Bd. Revenue, grading, draining and sand-clay surfacing 4.3 mi. road in Covington Co. J. M. Garrett, co. engr.

Ga., Montezuma—Until Aug. 15, by city paving 12,000 sq.yd. streets, vitr. brick, cement concrete, bituminous concrete, bituminous macadam or creosoted wood block.

Ky., Danville—(Official)—Until Aug. 14, by Boyle Co. Fiscal Court, county road No. 14, waterbound macadam. C. B. Arnold, co. rd. engr. Noted Apr. 26.

Ind., Indianapolis—(Official)—Until Aug. 13, by Bd. Pub. Wks., grading, paving portions California, Washington and Court Sts., wooden blocks, asphalt, bituminous concrete, or brick, 6-in. gravel concrete foundation. J. A. Rink, pres. B. J. T. Jenks, city engr.

Ind., Indianapolis—(Official)—Until Aug. 15, by Bd. Pub. Wks., grading, paving portions Middle, Illinois, New York and other streets, wooden blocks, asphalt, bituminous concrete, or brick, 6 in. gravel concrete foundation; also grading and paving sidewalks, Blvd. Pl. Harding St., and other streets, cement. J. A. Rink, pres. B. J. T. Jenks, city engr.

Mich., Allegan—Until Aug. 18 by W. McCarn, chn. Allegan Co. Rd. Comn., building road running south 2 mi. between Dorr and Leighton Twps.

Ill., Danville—(Official)—Until Aug. 13, by Bd. Local Imprv. paving portion Robinson St. W. H. Martin, city engr.

Ill., Jacksonville—(Official)—Until Aug. 13, by Bd. Local Imprv., improving roadways, South West, West Morgan, South Sandy Sts., College Ave., and other streets. E. M. Henderson, city engr.

Ill., Peoria—(Official)—Until Aug. 13, by Bd. Local Imprv., paving Kansas Ave., vitr. brick, including 1502 lin.ft. sandstone curb, 2510 sq.yd. concrete foundation and same amount of brick pavement. L. D. Jeffries, city engr.

Ia., Dubuque—(Official)—Until Aug. 20 by City, for improving portion Cox St. involving 1695 sq.yd. macadam, 1800 lin.ft. curb and gutter, 2720 cu.yd. rutting and 1740 cu.yd. filling. E. C. Blake, city engr.

Minn., St. Paul—(Official)—Until Aug. 20, by H. W. Austin, city purch. agt., grading portions Fulham St., May and Hamline Ave. and certain alleys; also curbing portion Jenks St., furnishing material paving portion 9th St., including 915 sq.yd. vitr. clay brick, 2710 sq.yd. sandstone blocks, 1177 bbls. portland cement, etc. O. Claussen, city engr.

Neb., Nebraska City—Until Aug. 20, by Otoe Co., grading 20,000 yd. road. O. Stevenson, clk.

Mont., Billings—Until Aug. 21 by J. M. Bresnahan, clk., for paving 7360 sq.yd. in Dist. No. 157. E. M. Schneckerberger, city engr.

Okla., Oklahoma—Until Aug. 30, by City, for 2 mi. rock asphalt paving. G. V. McClure, city engr.

Streets and Roads (Continued)

Okla., Sand Springs—Until Aug. 15, by City paving 30,000 yd. streets, Dist. No. 2, asphaltic concrete. About $85,000. Benham Eng. Co., 1300 Colcord Bldg., Oklahoma, engrs. Noted July 5.

Colorado—Until Aug. 16, by State Highway Comn., Denver, building road Estes Park to Grand Lake, 5½ mi.

Idaho, Salmon—Until Aug. 20 by Lemhi Co. Comrs., building 16-mi. Lemhi Highway. Allen & Merrett, engrs.

Utah, Salt Lake City—Until Aug. 14, by City Rec., for paving Virginia and Alta Sts. and 3rd and 4th Aves., also grading, curbing, guttering and paving of Pavement Extension No. 137. S. Q. Cannon, city engr.

Wash., Seattle—Until Aug. 21, by King Co. Comrs. building Kirkland-Houghton Rd. Permanent Highway No. G. About $15,000. S. J. Humes, co. engr.

Wash., Walla Walla—Until Aug. 18 by County Comrs., building permanent highway No. 18, Walla Walla Co. G. Cookerly, co. engr.

California—Until Aug. 20 by State Highway Comn., 515 Forum Bldg., Sacramento, paving 13.3 mi. road from Sacramento River to Lamoine Shasta Co. with concrete.

Cal., Santa Barbara—Until Aug. 16, by A. C. Hall, city clk., paving 17 blocks Bath St., from Montecito to Mission Sts., 5-in. concrete, 1½- warrenite wearing surface, including 3-ft. concrete gutters, cement and stone curbs, 126-ft. concrete cross gutters, 20 concrete catchbasins, 6- and 18-in. vitr. pipe sewers, rubble stone retaining wall, etc. About $65,000. A. B. Cook, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston — E. F. Murphy, comr. pub. wks., 511 City Hall Annex, let contract paving Seaver St., Roxbury to Warren Bros., 142 Berkeley St. Noted June 28.

Mass., Dedham—Town received low bid building highway and 2 bridges, Bussey St., from Clark & Gore, 11 Montague St., Dorchester, $26,000.

Mass., Woburn—(Official)—State Highway Comn., Boston, received only bid paving, asphalt macadam, from A. Pallato, 1117 Crosby St., Lowell, $14,405.

N. Y., Brooklyn—W. Williams, comr. Water Supply, Gas and Electricity, Municipal Bldg., Manhattan, received low bid paving roadway, furnishing new fence posts, and resetting fence in front of Mt. Prospect Laboratory, Flatbush Ave., near Eastern Pkway., from F. Gallagher, 490 Park Pl., $21,089. Noted July 19.

★N. Y., New York—(Official)—M. M. Marks, boro. pres., let contract regulating and paving roadway of West 172nd St. from B'way. to Ft. Washington Ave., asphalt; and from Ft. Washington to Haven Ave., bituminous concrete, concrete foundation, also portion Houston St., asphalt, to Davney Asphalt Co., 52 Vanderbilt Ave., $11,844. Noted July 19.

★N. Y., Port Washington—Town let contract improving Reid and Murray Aves., Washington and Mitchell Pl. to Andrews Bros., Mineola, $48,364.

★N. Y., Poughkeepsie — (Official) — Bd. Pub. Wks. let contract paving, grading and curbing various streets, brick, bituminous and asphaltic concrete, to Schenectady Constr. Co., 332 State St., Schenectady. About $65,202. Noted June 21.

★N. Y., Yonkers—City let contract regulating, grading, etc., portion Central Park Ave. to T. Grady, 11 Myrtle St., $66,437.

★N. J., Cape May—Bd. Freeholders Cape May Co. let contract paving 3-mi. road, bituminous top, to E. A. Corson, Ocean City, $60,000.

N. J., Paterson—Passaic Co. received low bids paving (a) Madison Ave., (b) East Main St., (c) 1st Sect. Goffle Rd., (d) 2nd Sect. Goffle Rd., (e) East 18th St., (f) Murray Ave., (g) Franklin Ave., from M. J. O'Connell (a) $31,043 (b) $20,127; J. T. Harrop, East 30th St., (a) $32,839 (b) $19,428 (c) $12,968 (d) $22,259; G. F. Brackett, (a) $33,192; G. Dreher, Paterson, (c) $11,982 (d) $21,971; Franklin Contr. Co., 52 Vanderbilt Ave., New York City, (e) $7336; L. Cramer, (e) $7624; P. Kramer, Grand St., (f) $12,965; McKierman & Bergin, 1st Natl. Bank Bldg., (f) $13,947; F. Spats, (g) $29,964; Union Building & Contr. Co., Main Ave., Passaic, (g) $31,169.

N. J., Paterson—Bd. Freeholders received low bids paving River Dr. from G. B. Belcher, Paterson, about $30,597; Union Bldg. and Constr. Co., Main Ave., Passaic, $39,794; M. J. O'Connell, Paterson, $42,357; Cedar Grove Rd. and Wilmore Ave., Francisco Bros., United Bank Bldg., $24,029, Osborne & Marselis, Paterson, $25,121; and M. J. O'Connell, $25,486.

★N. J., Somerville—Bd. Freeholders Somerset Co. let contract improving 2.84 mi. Mead-Griggstown Rd., waterbound macadam, to Hickey Constr. Co., Somerville, $12,100. Noted July 12.

N. J., South River—Bd. Freeholders Middlesex Co., New Brunswick, received low bids paving Main, Ferry, Causeways Sts. and South Amboy-Sayreville Rd. from T. H. Riddle, 102 Church St., New Brunswick, $40,576; Utility Constr. Co., 46 Paterson St., New Brunswick, $41,317; Graham & McKeon, $41,328. Noted July 26.

Pennsylvania—(Official)—State Highway Comn., Harrisburg, received low bids road work as follows: McKean Co. Route 96, Olean, N. Y., to Pennsylvania-New York state line, Foster Twp., 8367 ft. vitr. brick, from E. M. Love & Sons, Corry, $54,502; J. B. Sheehan, Bradford, $56,939, Eartino & Bevaqua, Bradford, $59,153; Somerset Co. Route 51, Myersdale to Garrett, from R. B. Taylor, Bellefonte, $81,428; Hoblitzell & Price, Myersdale, $114,977; W. G. Evans, Ambler, $146,711. Noted July 12.

★Pa., Birdsboro—City let contract macadamizing Main and Furnace Sts. to I. S. Horton & Co., Reading.

★Pa., Carnegie—City let contract paving portion Cubbage, Elm, and 4th, Howard, Jane, Walnut, Williams Sts., and 7th, 1st and Midland Aves. to S. Gamble Co.

★Pa., Dorranceton — Boro. let contract paving and installing storm sewers Pierce St. to B. G. Coons Constr. Co., Luzerne, $12,500.

★Pa., East Mauch Chunk—Boro. let contract paving 1852 ft. Center St., to C. E. Riebe, Lansford, $2.70 per sq.ft. Noted Apr. 19.

★Pa., Erie—(Official)—City let contract paving Lighthouse St. to J. J. Doyle, 457 West 3rd St., $12,069.

★Pa., Sayre—Town let contract paving North Elmer Ave. to R. J. De Long, 516 Anthony St., Williamsport, $16,406.

★Maryland—State Highway Comn., Baltimore, let contract building 4.64 mi. concrete road, Talbot Co. to Shafer & Williams, Easton; roads, Frederick Co. to M. J. Grove Lime Co., Limekiln.

★Va., Lynchburg—City let contract roadway, Campbell Courthouse Turnpike from Grace St. to city limits, rubble stone, to Burnett Bros., Lynchburg, $13,000.

★Ala., Bessemer—City let contract paving portion 2nd Ave. to Sullivan, Long & Haggert, Bessemer, $2.25 per sq.yd.

★Miss., Biloxi—City let contract resurfacing streets to W. E. Callahan, City National Bank Bldg., Omaha, Neb. About $35,000. Noted July 12.

★Tenn., Chattanooga — Hamilton Co. Comrs. let contract paving Market St. bridge, oil distillate asphalt, to West Constr. Co., 10th and Market Sts., $29,456.

★Tenn., Wartburg—Morgan Co. Comrs. let contract surfacing, crushed sandrock, surfaced with chert, near Lancing, to Arthur B. Long, Victoria, $20,000.

★Ky., Carrolton—City let contract paving portions Main, 5th and Court Sts., concrete, to Mastor Constr. Co., Seymour, Ind., $2.40 per yd. Noted July 26.

★Ky., Jenkins—City let contract 4400 sq. yd. paving, concrete, to Phelps-Post-Gwyn Co., Lexington, $2.25 per sq.yd.

O., Canton—City received low bid improving portion Belden Ave., N. E., from Cable Co., and Wise Bros., both of Canton. Noted June 28.

★O., Cleveland—Bd. Control let contract paving portion Clifton Rd. to Cleveland Trinidad Paving Co., The Arcade, $55,325. Noted July 19.

★O., Columbus—City let contract paving Edward and Hamilton Sts. and St. Clair Ave. to G. Pugh, Commerce Bldg., also paving several streets to Andrews Asphalt Paving Co., 464 West 6th Ave.

★O., Coshocton—City let contract grading, paving and curbing 6th and Pine Sts. to J. Hall; Benman Ave. to Henderson Bros. About $12,912. Noted July 19.

★O., Coshocton—City let contract paving Roscoe St. to Henderson Bros., Coshocton, $17,700.

★O., Dayton—City let contract paving portion Burkhardt Ave. to Finke Eng. Co., $2.85 per sq.yd.; East 3rd St. to E. Murray, $2.76 per sq.yd.

★O., East Liverpool—(Official)—T. Doherty, dir. pub. serv., let contract paving Penn Ave., Elizabeth and Harvey Sts., to F. G. Waggoner, Carrollton. Noted July 19.

★O., Fremont—Sandusky Co. let contract improving 2 mi. Cleveland-Sandusky Rd., concrete to J. Gotron, $40,000.

★O., Marion—City let contract sidewalks on Herber, Spencer, Glad, Ivanhoe and other streets, to J. H. Kinsler, Marion. Noted Apr. 26.

★O., Marysville—Union Co. let contract building Wapakoneta-Roundhead Rd., 11.72 mi. to Creagor & Co., Hamler, $59,923.

O., Newport—City received low bids repaving portion 3rd St., wood block, from E. J. Knepfle, $14,291, Schoolfield & Jones, $15,980; Metzel & O'Hearn, $14,339. Contractors all of Newport.

★O., Warren—Trumball Co. Comrs. let contract building New Buffalo Rd. to E. E. Miller, $14,600; McClure Rd. to Gialdini & Mango, $11,000; Burley Rd. to L. H. Young, $16,700; Salem-Warren Rd. to J. E. Paxton, $27,700; Damascus Rd. to L. H. Young, $20,500.

★O., Youngstown—Mahoning Co. Comrs. let contract macadamizing roads as follows: Damascus, Berlin and Princetown Rd., Sect. No. 6, to L. H. Young, $20,565; Salem-Warren Rd., Sect. No. 3, to J. D. Paxon, $28,733; Burkey Rd., Sect. No. 1, to L. H. Young, $16,771; McClurg Rd., Sect. 2, G. Mango, $10,997; New Buffalo and Ribletts Corners' Rd., Sect. No. 3, to E. E. Miller, $14,658; contractors all of Youngstown.

★Ind., Elkhart—City let contract paving Edwardsburg Ave., brick, to Northern Constr. Co., Elkhart, $28,492; Greenleaf Park, bituminous macadam to E. Atkins, Elkhart, $21,400. Noted Aug. 2.

★Ind., Ft. Wayne—City let contract resurfacing Fairfield View Pl., bituminous concrete, and portion Bryn Mawr Ave., to Grace Constr. & Supply Co., 702 Wintes St., paving portion State Blvd., to Crudes Realty Co., Ft. Wayne.

Ind., Ft. Wayne—City received low bids paving Coombs, Osage, and Wall Sts., brick, and Liberty, Grace, Garden, Kinnaird, Lake and Wildwood Aves. and Lasselle and Webster Sts., bituminous concrete, from Grace Constr. Co., 1702 Winter St. and Moellering Constr. Co., Ft. Wayne. Noted June 7.

★Ind., Logansport—City let contract paving Miami Ave., to Andrews Asphalt Paving Co., Hamilton, $2.05 per sq. yd. Noted July 26.

Ind., Michigan City—Bd. Pub. Wks. received low bids paving portions 11th St. Municipal Contr. & Supply Co., Gary, and Williston Constr. Co., 243 South Dearborn St., Chicago. Noted July 19.

★Ind., Rochester—Marshall and Fulton Co. comrs. let contract building Gibbons Co. line gravel road; about 8 mi. to J. M. Hatch, Macy. Noted July 5.

Ind., South Bend—(Official)—City let contract paving portions Howard St., asphaltic concrete, to Williston Constr. Co., 343 South Dearborn St., Chicago. Noted July 26.

Ind., Terre Haute—Vigo Co. received low bid paving 2½ mi. South 25th St. brick, from Weaver & Welch Co., Terre Haute, $70,382, Foulkes Contr. Co., 705 Ohio St., $70,458. Noted July 26.

★Ind., Warsaw — Kosciusko Co. Comrs. let contract concrete roads to Hutton-Harris Constr. Co., Mt. Vernon, $44,700.

★Ind., Whiting—Bd. Local Improv. let contract paving Standard Ave. to Laverne Bros., 424 Summer St., Hammond, $30,000.

★Mich., Grand Rapids — Kent Co. Rd. Comn. let contract building 7½ mi. Byron-Center Rd., Byron and Wyoming Twps., concrete to Golden & Boter, 25 Market Ave., N. W.

★Illinois—State Highway Comn., Springfield, let contract building roads, Neponsit and Greenville Cos., to Keokuk Quarry Constr. Co., Keokuk, $22,186 and $22,507 respectively.

★Ill., Riverside—City let contract paving Riverside Park and Ave. to W. P. Ryan, Lyons, $25,000.

★Ill., Rockford—(Official) — Winnebago Co. let contract building roads on Sect. F, Route No. 5 to Hart & Page, 110 North Court St., $33,016, exclusive of cement.

Ill., Rockford—City received low bids paving 11th St., to Government cantonment, 2 mi. concrete, from J. A. Sickley, 133 West Washington St., Chicago, $32,854; Hart & Page, 110 North Court St., Rockford, $33,016. Noted July 26.

Streets and Roads (Continued)

★Ill., Springfield—County let contract, 4900 ft. concrete highway north of Chebanse limits to Goggins Constr. Co., Arcola. About $10,730.

★Ill., Springfield — (Official) — City let contract paving 15th and portion Laurel St., to J. O. Patterson & Co., Springfield, $13,468.

★Ill., West Frankfort — (Official) — Franklin Co. let contract building concrete highways and necessary bridges in Deming Twp. to Stocker Graveling & Constr. Co., Highland, $42,342. Noted July 19.

★Wis., Eau Claire—W. J. Wolf, highway comr., let contract road in Eau Claire Co. to J. Godder, Fairchild. About $50,000.

★Ia., Des Moines—City let contract paving 10,000 yd. streets, concrete, to Des Moines Asphalt Paving Co., 2nd and New York Aves., $2.09 per yd.

★Ia., Nevada—City let contract paving 10 blks., vitr. brick, to Cary & Sons, Clinton, $2.35 per yd.

★Ia., Spirit Lake—Dickinson Co. let contract about 12 mi. grading to J. E. Kughn & Sons, Dows, $.229.

Minn., Crookston—City received low paving 5000 sq.yd. streets, concrete, from J. McDonnell, Crookston, $2.09 per sq.yd.; Grand Forks Concrete Co., Grand Forks, $1.93 sq.yd.

★Neb., Beatrice—(Official)—City let contract paving Dists. Nos. 28, 29, 30, 31 and repaving Dist. No. 6 to Abel Constr. Co., Lincoln.

★Neb., Grand Island—City let contract paving Dist. No. 22, asphalt, to E. D. Tyner Constr. Co., Kansas City, Mo., $1.74 per yd.

★Neb., Hastings—City let contract paving 55,000 yd. sheet asphalt, to Watts Constr. Co., Salina, Kan., $1.84 per yd.

★Neb., Lincoln—Lancaster Co. Comrs. let contract paving and grading 1 mi. county highway, Dist. No. 16, to Roberts Constr. Co., Lincoln, $2.03 per sq.yd. Noted Aug. 2.

★Mont., Geraldine—City let contract for concrete walks, crosswalks and curbs to S. Birch & Sons Constr. Co., $17,000.

***Mo., Kansas City**—Bd. Pub. Wks let contract to J. Lyle Constr. Co., Grand Ave. Temple, paving 12 blocks 55th St., concrete and 1 block Brooklyn St., $1.56 and $1.46 per sq.yd. respectively; A. Jaicks Co., Amer. Bank Bldg., 1 mi. Prospect St., 1½ blocks 25th St., and 2 blocks 25th St., brick, $3.20, $3.05 and $3.18 respectively; D. T. Brosnaham, 3233 Karnes St., 2 blocks 32nd St., brick, $2.89; J. E. Welsh, 1122 East Gilman, Rd., 4 blocks on 25th St., brick and concrete, $3.00 and $1.60 respectively.

★Tex., Vega—Oldham Co. let contract building roads to Smith Bros., Crockett, $50,095.

★Okla., Oklahoma—City let contract paving 22nd St. to Western Paving Co., Terminal Bldg., $13,730.

Okla., Tulsa—City received low bid paving portions Gusher, Rice, Martin, Mitchell and other streets, from Eureka Paving Co., 1115 Carter Bldg., Houston, Tex., $425,000.

★Idaho, Cocatello—Bannock Co. let contract graveling Yellowstone Park highway, 12 mi. north of here, to J. J. Carroll, $10,000.

★Wash., Everett—Snohomish Co. Comrs. let contract paving 2½ mi. Edmonds Rd. to Reinseth Bros., Everett, $10,923.

★Wash., Seattle—King Co. Comrs. let contract rebuilding highway connecting Kirkland and Juanita, 2½ mi., to L. H. Goerig, Seattle, $45,000. Noted Apr. 26.

★Wash., Seattle — King Co. Comrs. let contract building final length Cascade Scenic Highway, 5½ mi. to Quigg Constr. Co., Hoge Bldg., $47,607. Noted July 19.

★Wash., Seattle—Bd. Pub. Wks. let contract grading 15th Ave. S. L. I. D. 3080 to Superior Constr. Co., 1642 Lane St., $10,427. Noted July 12.

★Oregon—State Highway Comn., Salem, let contract building 10 mi. Portland-Salem-East side Highway, Marion and Clackamas Cos. to Hassam Paving Co., Bd. Trade Bldg., Portland, $133,954; road from Multnomah Co. line to Newbury to O. Huber, Sherlock Bldg., Portland, $265,415; section Pacific Highway between Astoria and Swenson to Warren Constr. Co., Journal Bldg., Portland, $156,762.

★Ore., Astoria—City let contract paving and improving portion Exchange and 18th Sts. to Miller & Bauer, $46,034 and $16,245 respectively; installing sewers and building D. D. 4 to Keating & Jameson, $16,900. Noted Apr. 16.

★Cal., Berkeley—City let contract paving Hopkins St. to Clark & Henery Co., Ochsner Bldg., San Francisco, $33,705.

★Cal., Lemoore—City let contract improving streets and installing electrolier lighting-system to California Road and Street Improv. Co., Fresno, $140,000. Noted July 12.

Cal., Long Beach—City received low bid for 659,145 sq.ft. 4-in. concrete pavement, warrenite surface, 3275 lin.ft. 8-in. vitr. pipe sewer, corrugated iron pipe and concrete culverts, etc., on Atlantic Ave., from Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $91,340.

★Cal., Los Angeles—City let contract 70,183 sq.ft. paving, asphalt, 2395 sq.ft. granite block gutter, and vitr. pipe sanitary sewer in McPherson St. to G. H. Oswald, 405 O. T. Johnson Bldg., $12,747.

★Cal., San Diego—City let contract building 4-in. concrete paving with asphaltic surface on Sierra Vista and other streets to T. C. Breitenstein, 465 Van Wyck St., Pasadena. About $15,385. Noted Aug. 2.

★Cal., San Diego—City let contract building Sect. 1 of road to army cantonment at Linda Vista, involving 1710 cu.yd. excava., 10,400 cu.yd. embankment, 329,344 sq.ft. 5-in. paving, concrete and 200 ft. 2-in. cement pipe culverts, to Rooney-Wycoff Co., 421 Consolidated Realty Bldg., Los Angeles, $52,118; Sect. 2, taken under advisement, J. Engebretsen, 614 5th St., San Diego, low bidder, $22,146. Noted July 19.

★N. B., Monocton—City Council let contract building roads to Carritte-Paterson Co., Ltd., 89 Water St., St. John. About $16,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Pennsylvania—Lehigh Valley R.R. plans to electrify mountain divisions from Mauch Chunk to Wilkes-Barre and from Penn Haven to Mahoney City. E. B. Ashley, New York, ch. engr.

Maryland—Pennsylvania R.R. preparing plans for freight yards and other branch from Bayview Jct. to increase facilities to and from the plant of Bethlehem Steel Co. at Sparrow Point. A. C. Shand, Broad St. Sta., Phila., ch. engr.

North Carolina—Southern Ry. to lay 5 mi. tracks for army cantonment at Camp Greene, near Charlotte. W. H. Wells, Washington, D. C., ch. engr.

Minnesota—Duluth, Missabe & Northern Ry. prepared plans double-tracking 10-mi. line from Virginia to Wolf, also for additional yard tracks. About $150,000. H. L. Dresser, Duluth, ch. engr.

Texas—Freeport Sulphur Co. plans 60-mi. line from Freeport, Tex., to Rosenberg, by way of Brazzoria and Columbia. W. A. Randle, Freeport, ch. engr.

Oklahoma—Rock Island R.R. plans to extend line from Ft. Sill to army cantonment. About $200,000. C. A. Morse, Chicago, ch. engr.

Idaho—Oregon Short Line R.R. plans to build 4 mi. line from Idaho Falls and 7 mi. line from Firth. C. Stradley, Salt Lake City, Utah, ch. engr.

Arizona—A. B. McGaffey, Albuquerque, N. M., and associates making surveys 60-mi. railway from Holbrook to White River.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Georgia—Elberton & Eastern R.R. let contract 10-mi. extension from Tignall to Washington, to Stanley & Singer Constr. Co., Alabama.

★Ohio—Youngstown & Niles Ry. let contract new high speed electric line from Youngstown to Niles to J. W. Garland, Inc., bridges, culverts and similar works for entire line to S. R. Smythe Co., Inc., House Bldg., Pittsburgh.

★Arkansas—Missouri Pacific R.R. will build 4 mi. spur from Dalhoff to army cantonment north of Argenta, by company forces. Noted July 12.

★Ont., London—Canadian Pacific Ry. let contract grading work from London to Guelph, including sidings, bridges, etc. to Sherwood Constr. Co., Mail Bldg., Toronto, $185,000.

EXCAVATION AND DREDGING

Proposed Work

Fla., Ft. Pierce—Reclamation—St. Lucie D.D., Lucie Co., plans election to vote on $400,000 bonds to reclaim 75,000 acres of land.

Fla., Miami — Drainage — Dade and Brownard Cos. retained Isham, Randolph & Co., engrs., to make surveys building Napoleon B. Brownard D.D., involving 55[illegible] acres land between Deerfield and Miami. Address W. C. Kyle, Ft. Lauderdale, engr.

Ill., Marengo—Drainage — McHenry Co. plans to organize Coral-Grafton D. D. embracing 19,258 acres in McHenry and Lake Cos., plans involve 16-mi. open ditch, [illegible]281 cu.yd. excavation, 30-mi. tile drains.

Ill., Newton—Drainage — Comrs. North Fork D. D., Jasper Co., received no bids for drainage work involving 40,367 cu.yd. excavation. Will be readvertised. Fithian & Kasserman, Newton, attorneys. Noted June 21.

Minn., Fairmont—Ditches—Martin Co. sold $100,000 bonds to build drainage ditches. H. C. Nolte, aud.

Minn., Slayton—Ditch—E. V. O'Brien, co. aud. rejected bids repairing Co. Ditch No. 6 and Judicial Ditch No. 19. Noted July [illegible]

Minn., Thief River Falls—Drainage—State Drainage Engrs. making surveys Red Lake to establish drainage and flood control Dist. to drain 500,000 acres of land.

Kan., Westmoreland—Drainage — Pottawatomie Co. soon receives bids for drainage work in Lost Creek, Welch Creek and Vermillion River Dist. V. R. Parkhurst, Topeka, engr.

Neb., Omaha — Emerson-Brantingham Co., South Independence Ave., Rockford, Ill., will build 4-story, 108 x 132-ft. rein.-con. and brick warehouse, 11th and Jackson Sts., by day labor.

Neb., Lincoln—Drainage—Lancaster Co. soon lets contract building Salt Creek D. D., involving open ditch and channel work. W. S. Scott, 310 Little Bldg., engr.

Neb., Lincoln—Drainage—Lancaster Co. soon lets contract building Middle Creek D. D. No. 1, involving 100,000 cu.yd. open ditch and straightening and deepening creek. A. H. Edgren, co. engr. Noted July 26.

Utah, Salt Lake City—Reclamation—Salt Lake Co. soon receives bids reclaiming 4080 acres salt lands, Brighton D.D. Bonds for $80,000 voted for project. R. A. Hart, engr.

BIDS DESIRED

Ill., Paxton—Redredging—Until Aug. 21, by Cloud & Thompson, attorneys, Paxton, redredging main ditch, Union D. D., length 59,745 ft., yardage, 209,086 cu.yd.

Ia., Sibley—Drainage—Until Aug. 13, by Osceola Co., building D. D. No. 37, involving 1900 ft. open ditch, 56,450 ft. 6- to 30-in. tile, bulkheads, inlets, etc. About $32,000. D. W. Clayton, aud.

Ill., Sullivan—Drainage—Until Aug. 18, by Drainage Comr. Dist. 2, Livingston Co., building system of drainage involving 19,478 ft., 8-, 10-, 12-, 16-, 22- and 30-in. tile. J. D. Brown, comr.

Ia., Des Moines—Drainage—Until Aug. 20, by J. M. Wells, Nevada, engr. for Joint Dist. No. 1, Polk and Storey Cos., involving 16,629 ft. 18- 26- and 34-in. tile. About $26,405. Former bids rejected. F. J. Alber, clk. Polk Co. F. E. King, clk. Storey Co. Noted July 26.

Ia., Emmetsburg—Drainage—Until Aug. 16, by Palo Alto Co. building D. D. No. 98, involving 315,000 yd. excava., 8- to 12-ft. bottom, 106,180 ft. of 6-, 10-, 12-, 14-, 15-, 16-, 18-, 20-, 22-, 24-, 26-, 30- and 36-in. tile. G. R. Campbell, co. engr.

Minn., Madison—Until Aug. 14 by Lac Qui Parle Co., Building Co., Ditch No. 44, involving 12,750 ft. 6-, 8-, 9-, 10-, 12-, 14-, 15-, 16-, 18-, 20- and 22-in. tile, cost, $11,650; Co. Ditch No. 4, involving 51,100 ft. 6-, 7-, 8-, 9-, 10-, 12-, 14-, 15-, 16-, 18-, 20-, 22- and 24-in. tile. Cost, $56,838. A. G. Shogren, aud.

Minn., Owatonna—Ditch—Until Aug. 20, by M. J. Parcher, aud. Steele Co., building Co. Ditch No. 5, involving 168,476 cu.yd. excavation, spreading 84,238 cu.yd., 88,700 ft. tile, etc. About $51,450.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. C., Wilmington—Drainage—(Official)—W. E. Price, chn. bd. drainage comrs., let contract 9 mi. drainage ditches, D. D. No. 3, to Southern Drainage and Construction Co., Kingston, $13,000. Noted June 21.

★Fla., West Palm Beach—Bd. Superv. Lake Worth D. D., Palm Beach Co., let contract drainage work involving removal 7,205,000 cu.yd. earth, 180,000 cu.yd. rock, also building necessary bridges to A. V. Wills & Sons, St. Louis, Mo., and J. T. McCarthy, Gainesville, $684,684.

Excavation and Dredging (Continued)

★**Miss., Greenville**—Drainage—Washington Co. let contract building drainage ditch. 133 mi. long, involving 5,000,000 cu.yd. earthwork to J. B. Arpin Dredging Co., 422 Bing Bldg., Houston, $493,600.

★**Ky., Louisville** — Dredging — Jefferson Co. let contract dredging north and south forks Pong Creek to Miller Bros., Louisville. $30,420.

★**Mich., Sturgis**—Excavation—Bd. Pub. Wks. let contract excavating 3-mi. tail race for power plant on St. Joseph River to G. W. Bunker Co., 1570 Robinson Rd., Grand Rapids.

★**Ill., Geneseo**—Drainage—Henry Co. let contract 489,723 cu.yd. excavation, Lower Green River Spl. D. D. to W. Long, Sheffield and R. Meak, Jacksonville.

★**Ill., Lawrenceville**—Redredging—L. A. Funk, comr. Allison Ditch Dist. No. 1, Lawrence Co., let contract redredging 10-mi. ditch, involving 73,427 cu.yd. excavation to S. Day, Rock Island. Noted July 19.

★**Ill., Tuscola**—Drainage—Douglas Co. let contract laying 8640 ft. tile ditch, D. D. No. 8 to National Drain Tile Co., 20 Rose Disp. Bldg., Terre Haute, Ind., and Goggins Constr. Co., Arcola, Ill.

★**Ia., Boone**—Drainage—Joint Bd. Supervs., Boone and Storey Cos., let contract for Boone-Story Joint Drain Sub. No. 1 involving 35,000 ft. tile as follows: tile to Jefferson Cement Products Co., Jefferson, and Iowa Pipe and Tile Co., Des Moines; labor to A. G. Hueter, and Johnson & Caldwell, both of Lytton. Noted June 28.

★**Ia., Indianola**—Drainage—Squaw Creek D. D. No. 4, Warren Co., let contract new channel involving 543,401 cu.yd. excavation to L. E. Sternberg, Memphis. Noted July 5.

★**Ia., Logan**—Drainage—Harrison Co. let contract for Upper Soldier D. D. No. 2, involving 156,260 cu.yd. excavation to R. S. Morrow, 5006 Burt St., Omaha.

★**Ia., Mason City**—Drainage—Bd. Superv. Cerro Gordo Co. let contract building D. D. No. 53 to A. W. Dunlap.

★**Ia., Nevada**—Drainage—F. E. King, Aud. Story Co., let contract building Richland Twp. D. D. No. 81 to J. McKillip, Faribault, Minn., 19½c. per cu.yd., open work; Fry & Hankins, Cole, $11,533, labor; Macomb Sewer Pipe Co., $28,982, tile. Noted July 26.

★**Ia., Spencer**—Ditch—A. W. Chamberlain, Clay Co. aud., let contract for 393,000 cu.yd. excavation and 2 bulkheads on D. D. No. 37 to Northern Constr. Co., Elkhart. Noted July 5.

★**Minn., Austin**—Excavation, Etc.—A. C. White, Mower Co. engr., let contract 12,000 cu.yd. excavation, 17,000 cu.yd. borrow, 27,000 cu.yd. side borrow, 1000 cu.yd. side ditching, 1700 lin.ft. tiling to R. Drummond, Austin.

★**Minn., Mahnomen** — Ditch—Mahnomen Co. let contract building Co. Ditch No. 3, involving 173,422 cu.yd. excavation to W. H. Small & Son, Aitkin.

★**Minn., Mankato**—Ditch—Blue Earth Co. let contract building Judicial Ditch No. 15 to North Star Constr. Co., $64,975.

★**Neb., Lincoln**—Ditch—Lancaster Co. let contract straightening and deepening 2 mi. Dead Man's Run Ditch to E. Walworth, Lincoln.

★**S. D., Madison**—Ditch—Lake County let contract building ditch to P. A. Thompson, Green, Ia., $32,750.

★**Ore., Astoria**—Drainage—See "Streets and Roads."

INDUSTRIAL WORKS

Proposed Work

Conn., New Haven — American Steel & Wire Co., 238 Fairmont Ave., Worcester, plans 1-story, 88 x 363 ft. brick rope mill, 1-story, 50 x 125 ft. addition to building No. 31 and 1-story, 223 ft. addition to No. 7.

N. Y., Brooklyn—Lancaster Realty Co. having plans prepared by Shampan & Shampan, 772 Broadway, 2-story, 121 x 155-ft. brick service station. About $150,000. L. Gold, 44 Court St., pres.

N. Y., Flushing—New York & Queens Electric Light, Heat & Power Co., 444 Jackson Ave., Long Island City, plans 2-story, 94 x 103 ft. brick, steel and concrete substation and storehouse on Lawrence Ave. About $50,000. W. W. Knowles, 37 West 39th St., New York City, archt.

N. J., Kingsland—Canadian Car & Fdry. Co., 165 Bway., New York City, plans rebuilding large munition factory recently destroyed by fire. J. G. Evans, asst. mgr.

N. J., Trenton—American Steel & Wire Co., Hamilton Ave., plans 1-story, 173 x 173 ft. brick and steel addition to wire rope plant; also addition to machine shop.

Pa., Darby—Griswold Worsted Co. plans filter plant. Willard Case Co., 1st Natl. Bank Bldg., Phila., archts.

Pa., Phila.—Pennsylvania R.R. plans large addition to shops between 47th and 48th Sts. A. E. Shand, Broad St. Sta., ch. engr.

Pa., Phila.—G. P. Wetherill & Co. having plans prepared by G. King & Co., archts., 1513 Walnut St., 4-story, 37 x 78-ft. brick and concrete, 16 x 30-ft. wing factory, 114 North Front St.

S. C., Beaufort—American Shipbuilding & Dry Dock Corp. plans shipbuilding plant on Beaufort River, including shipways, machine shops and erecting shops. R. C. Horne, Jr., Beaufort, pres.

O., Cincinnati—Natl. Lead Co., 659 Freeman Ave., plans 3-story, 50 x 100-ft. plant. About $60,000. E. C. Goshoin, mgr. B. L. Baldwin, Clerin Bldg., archt.

O., Cleveland—H. D. Koblitz, 370 The Arcade, purchased site on East 72nd St. and will build 4 6-story factory buildings. About $500,000.

O., Cleveland — Morgan Lithographing Co., St. Clair Ave., plans 3-story, 138 x 250 ft. plant on Payne Ave. and East 17th St. About $250,000.

O., Defiance—Definance Machine Works has increased its capital stock from $600,000 to $1,200,000 and plans 2-story, concrete and brick plant on 3rd, Perry and Jackson Sts. W. F. McCarty, c/o W. B. Daoust, Holgate Ave., ch. engr.

Mich., Coldwater—Michigan Tire & Rubber Co. plans 2-story steel and concrete factory. About $50,000. W. C. Owen & Co., 1900 Euclid Ave., Cleveland, archt.

Mich., Highland Park—J. H. McDonald, attorney, 1323 Woodward Ave., Detroit, plans 3-story, 56 x 150 ft. garage and salesroom. About $60,000. A. E. Harley, 1204 Kresge Bldg., Detroit, archt.

Ill., Chicago—Chicago Screw Co., 1026 Homan Ave., plans factory on 66 x 125 ft. site. About $500,000.

Ill., Chicago—General Electric Co., Nela Park, Cleveland, plans brick warehouse and office building. About $60,000. G. H. Johnson, Citizens Bldg., archt.

Ill., Chicago—Monarch Leather Co., 1101 West Division St., plans 5-story, 60 x 150 ft. leather factory. About $150,000. W. N. Eisenarath, pres. Stern & Reichert, archts., 220 South State St., soon receive bids.

Ill., Chicago—Nat. Biscuit Co., 110 North Morgan St., plans large industrial plant to cost several million dollars.

Ill., Chicago—Peoples Gas Light & Coke Co., 122 South Michigan Ave., receives bids about Jan. 1 for plant. About $30,000,000. R. Scheck, archt.

Wis., Superior—Duluth-Superior Milling Co., 620 Bd. of Trade Bldg., Duluth, plans 150 x 310-ft. addition to Daisy Mill. About $80,000.

Mo., St. Louis—American Mfg. Co., Rialto Bldg., plans large bagging plant in East St. Louis. About $500,000. J. D. Filley, pres.

Tex., El Paso—El Paso Valley Water Users Assn. plans large hydro-electric plant at Elephant Butte Dam with 40,000 hp. capacity. About $1,000,000.

Tex., Grand Prairie—Grand Prairie Mfg. Co. plans rebuilding brick factory recently destroyed by fire. About $125,000.

Tex., Houston—F. Wilde, Houston, has leased site on Houston ship channel and plans 60 x 100-ft. brick plant. About $100,000.

Tex., Orange—Orange Hardwood Lumber Co. plans lumber mill here. About $50,000.

Okla., Oklahoma City—Sifers Candy Co., 517 Grain Ex. Bldg., Hutchinson, Kan., receives bids about Aug. 11, 5-story, 60 x 120 ft. About $70,000. Bailey & Bailey, 616 Colcord Bldg., archt. Noted Apr. 12.

Okla., Ringling — Peoples Refining Co., Oklahoma City, receives bids about Aug. 20, stills, storage tanks, pumps and power house. About $65,000. E. D. Smith, 515 Insurance Bldg., Oklahoma City, mgr.

N. Mex., Las Cruces—Holly Sugar Co., Colorado, plans large sugar factory here. About $1,000,000.

Ore., Portland—City having plans prepared by G. B. Hagardt, engr. comn. pub. docks, first unit grain elevator, capacity 1,000,000 bushels.

Ore., Portland—Hesse & Martin Iron Wks., 434 Belmont St., plans forge and foundry shop addition to plant. About $100,000.

BIDS DESIRED

N. Y., New Hampton—Until Aug. 20, by B. G. Lewis, comr. of Correction, Municipal Bldg., New York, building power house and connecting tunnels of New York City reformatory.

Wis., Milwaukee—Until Sept. 1 by Fraser Co., engrs., 667 East Water St. 7-story, 150 x 180 ft. rein.-con. and brick, elevator and warehouse. About $200,000 for L. Towles Seed Co., 113 Clybourn St. Noted July 26.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., New Bedford** — Pairpont Co., Prospect St., let contract 4-story, 100 x 200 ft. brick storehouse on Howland and Prospect Sts., to J. W. Bishop, 109 Foster St. Noted Aug. 2.

★**N. Y., Brooklyn**—Sperry Gyroscope Co. let contract 11-story, 99 x 149-ft. plant to Turner Constr. Co., 244 Madison Ave., New York City.

★**N. Y., Buffalo**—Curtiss Aeroplane Co., 1739 Elmwood Ave., let contract 1,000,000 sq.ft. factory addition to S. Austin Co., 14230 Euclid Ave., Cleveland. About $5,000,000. Noted Aug. 2.

★**N. Y., Buffalo**—Pennsylvania R.R. let contract 2-story, brick, concrete and steel freight house; also 2 bridges to G. H. Scheckler & Sons, Erie Ave., $200,000.

★**N. J., Harrison**—General Electric Co. let contract 2-story, 135 x 255 ft. rein.-con. and struc. steel, glass bulb factory to E. M. Waldron, Inc., 207 Market St., Newark. About $150,000. Noted July 5.

★**O., Cleveland**—Torbenson Axle Co., 1115 East 152nd St., let contract 109 x 142-ft. steel plant to Austin Co., 14330 Euclid Ave. About $50,000.

★**Ill., Chicago**—Gallanis Bros., 2035 Halsted St., let contract 6-story rein.-con. candy factory to Lewis Constr. Co. About $200,000.

★**Ia., Davenport**—Standard Oil Co. let contract warehouse and garage to H. G. Hays Constr. Co., 335 Masonic Temple. About $80,000.

★**Ia., Des Moines**—Bast-Forgarty Milling Co., Des Moines, let contract, brick and rein.-con. mill, headhouse, tanks and warehouse to A. H. Neumann & Co., Hubbell Bldg. About $65,000.

★**Ark., Ft. Smith**—Ft. Smith Cotton Compress Co., South Side, let contract 1-story, 151 x 380-ft. rein.-con. warehouse to T. T. Reddick, General Contr. & Bldg. Co., 2701 May Ave. About $50,000.

★**Que., Chambly Canton** — Canadian Leatherboard Co. let contract new plant to Trussed Concrete Steel Co., 285 Beaver Hall Hill, Montreal. About $225,000. Noted Aug. 2.

BUILDINGS

Proposed Work

Me., Hallowell — State school — F. W. Hinckley, chn. trustees, Portland, soon receives bids 2-story, 50 x 122 ft. brick. About $60,000. W. G. Bunker, Augusta Trust Bldg., Augusta, archt.

Mass., Boston—Office—A. Geiger, Jr., 87 Milk St., plans 7-story, 103 x 120 ft., on Massachusetts Ave. and Newbury St. About $750,000.

Mass., Worcester — Home — Worcester Aerie, F. O. E., plans 3-story, 98 x 86 ft. brick, Main and Carleton Sts. F. Coulson, archt., 405 Main St., soon receives bids.

Mass., Worthington — Hotel — Worthington Inn, Worthington, soon lets contract 4-story, 40 x 124-ft. addition and 30 x 40 ft. "L." About $75,000. Putnam & Taylor, 78 Main St., Northampton, archts.

Conn., Stamford—Pavilion — City plans bathing pavilion. About $100,000. H. Marvin, Gulley Blk., engr.

N. Y., Buffalo—Church—St. John Evangelist Congregation plans 1-story. About $75,000. M. K. Weber, 2315 Seneca St., pastor. C. Schmill & Sons, 1338 Prudential Bldg., archts.

Buildings (Continued)

N. Y., New York—Theater and Office—Jason Bldg. Co., 225 West 44th St., plans 5-story, 100 x 111 ft. About $50,000. J. J. Shubert, pres. H. J. Krapp, 116 East 16th St., archt.

N. Y., Watertown—School—Bd. Educ. rejected bids, addition and alteration. New bids soon. About $60,000. F. S. Tisdale, City Hall, supt. bd. educ. A. F. Lansing, Sherman Blk., archt.

N. J., Union—School—Bd. Educ. soon receives bids for new School No. 2. About $200,000.

Pa., Braddock—Bank, Store and Office—N. M. Holland Estate, P. S. Kennington, 743 Braddock Ave., executor, plans 3-story, 40 x 129 ft. About $50,000. Carlisle & Sharrer, archts., Jenkins Arcade, soon receive bids.

Pa., Farrell—Shenango Land Co. plans about 200 new buildings.

Del., Dover—Courthouse—Kent Co. plans 2-story addition. About $70,000. J. L. Hopkins, R. D. Harrington, chn. bldg. comm. Wilson, Eyre & McIlvain, 1003 Spruce St., Phila., archts.

Va., Lynchburg—(Official)—Y. W. C. A. soon lets contract brick and stone. N. Chase, secy. S. S. Johnson, 603-5 Peoples Natl. Bank Bldg., archt.

O., Akron — Hospital — County Comrs. voted $50,000 bond issue for addition to Childrens Home.

O., Canton — Office — United Alloy Steel Corp., Belden Ave., soon receives bids, 2-story, 50 x 200 ft. brick, on Georgetown Rd. About $100,000. H. R. Jones, pres. W. Hirsh, 1303 Swetland Bldg., Cleveland, archt.

O., Cleveland — Home — Jewish Infants Orphan Home, 2200 East 40th St., c/o A. Horwitz, Leader-News Bldg., purchased site at Euclid Ave. and plans to build. About $50,000 to $100,000.

O., Cleveland—Office—Physicians & Dentists Bldg. Co. plans, 16-story. About $1,000,000. R. G. Lee, Amer. Trust Bldg., interested.

O., Cleveland—Theatre and Store—M. M. Schoektel soon lets contract, 4-story, 50 x 132-ft. steel and concrete, 1862-66 East 9th St. About $70,000. G. Grielle, Park Bldg., archt.

O., Cleveland—Y. M. C. A.—Young Men's Investment Co., 938 Schofield Bldg., soon receives bids, 6-story, 112 x 200 ft. About $200,000. F. Hart, pres. J. Eisemann, 521 The Arcade, archts.

O., Gallipolis—Dormitories—Ohio Bd. Administration plans 1-story, 100 x 100-ft. T. E. Davey, Oak and 9th Sts., Columbus, pres.

O., Lakewood—Church and School—St. Gregory's Congregation, c/o G. Ivanko, 2040 Halstead St., soon lets contract, 2-story, 42 x 80 ft. brick and steel, at Dowd and Madison Sts. About $50,000. C. J. Lorenz, 5321 Bway., archt.

O., Mansfield—State Reformatory—Ohio Bd. Administration, Oak and 9th Sts., Columbus, will build 1-story, 50 x 180-ft. addition and 2 50 x 90-ft. wings. About $100,000. D. C. Creamer, secy.

O., Orient—Dormitories — Ohio Bd. Administration plans, 5 1-story, 100 x 100 ft. About $142,000. T. E. Davey, Oak and 39th Sts., Columbus, pres.

Ind., Kokomo—Temple — Howard Lodge No. 93, F. and A. M. Bldg., plans, 4-story, 76 x 95 ft. About $75,000. W. H. Williamson, chn. bldg. comn. E. E. Dunlap, 909 State Bldg., Indianapolis, archt.

Mich., Champion — School — Bd. Educ. plans 3-story building. J. D. Chubb, 109 North Dearborn St., Chicago, archt. About $75,000.

Mich., Vassar—School—Bd. Educ. plans rebuilding, 3-story, 70 x 148 ft. About $55,000. G. D. Claek, pres. J. C. Peterson, Traverse City, archt.

Ill., Aurora—Sanatorium — M. Diabetis Sanatorium plans 3-story, 60 x 100 ft. About $80,000. Worst & Shepardson, archts., Coulter Bldg., soon receive bids.

Ill., Chicago—Theater—Woodlawn Theater Co., 853-55 East 63rd St., soon lets contract 1-story, brick. About $200,000. H. L. Newhouse, 4630 Prairie Ave., archt.

Ia., Charitown—Hospital—Lucas Co. election Oct. 15 to vote on $50,000 bonds to build hospital. F. M. Wilson, aud.

Ia., Des Moines — Hospital — Polk Co. plans election Oct. 15 to vote on $100,000 bond issue to build tuberculosis hospital.

Minn., Kasson—High School—Bd. Educ. plans building in School Dist. No. 3. About $75,000. N. E. Beard, clk. N. Jacobson, Owatonna, archt.

Minn., Minneapolis — Children's Hospital —City hospital soon lets contract, 2-story, 48 x 205-ft. About $60,000. A. O'Donnell, supvr. Long, Lamereaux & Long, 830 Hennipin Ave., archts. Noted July 12.

Kan., Topeka—Freight and Office—Atchison, Topeka & Santa Fe Ry. plans, 2-story on Rex Mill property. About $200,000. R. A. Rutledge, Topeka, ch. engr.

Kan., Wichita—Hotel—Lassen soon lets contract 12-story, 75 x 125 ft. About $625,000. H. Lassen, pres. Richards, McCarry & Bulford, Hartman Bldg., Columbus, archts.

Neb., Franklin—Hotel—Nebraska Bldg. & Investment Co., 120 South 13th St., Lincoln, plans 3-story, brick and stone. About $50,000. J. E. Schaff, pres.

Neb., Omaha — Hospital — Bd. Regents, State University, plans, 4-story, brick and stone. About $130,000. J. S. Dales, Sta. A., Lincoln, secy. J. Latenser & Sons, 626-32 Bee Bldg., archts.

S. D., Brookings—Hall—State Bd. Regents, Pierre, plans 1-story, 132 x 220 ft. About $80,000. P. H. Ellerbe, Endicott Bldg., St. Paul, archt.

Wyo., Thermopolis — Hotel and Bath Houses—Washakie Hotel Co., Thermopolis, plans 5-story, 200 x 200 ft. About $500,000. M. S. Fallis, archt., 900 Ideal Bldg., Denver, soon receives bids.

Mo., Columbia — Dormitory — Stephens College plans, 3-story, brick. About $50,000. J. M. Wood, pres.

Tex., Dallas—Theater and Office—Interstate Amusement Co., Dallas, plans 10-story, 120 x 200 ft. About $350,000. J. Eberson, archt., 64 East Van Buren St., Chicago, soon receives bids.

Cal., Fresno—Natatorium—Fresno Natatorium Co. plans 125 x 150-ft. brick and concrete, San Jacquin and I Sts. About $50,000. F. A. Gardner, secy. Coates & Traver, Rowell Bldg., archt.

BIDS DESIRED

N. H., Nashua—High School—Until Aug. 13 by Bd. Educ., 3-story, 152 x 183 ft., brick and stone. About $200,000. T. M. James, 1855 Devonshire St., Boston, archt. Noted July 16.

Mass., Boston—School—Until Aug. 17 by Bd. Educ., 3-story, 120 x 176 ft., brick and stone, Charter and Phipps Pl. About $150,000. J. McGinniss, 16 Arlington Pl., archt.

Mass., Mattapan—Nurses' Home—Until Aug. 22 by Boston State Hospital, Boston, 3-story, 35 x 147 ft. brick and stone. K. Taylor & Co., 93 Federal St., Boston, archts.

N. Y., Brooklyn—Library—Until Aug. 20 by Bd. of Trustees, 26 Brevoort St., 2-story, 80 x 82-ft., 4th Ave. and Pacific St. R. F. Almerall, 12 East 46th St., New York City, archt.

N. Y., Elmira—Library—Until Sept. 1 by city, 2-story, brick and stone. About $50,000. H. D. Whitfield, 160 5th Ave., New York City.

Pa., Holmesburg—House of Correction—(Official)—Until Aug. 15, by W. H. Wilson, dir. pub. safety, for alterations and additions. About $150,000. C. E. Oeschlager, 1615 Walnut St., Philadelphia, archt. Noted Aug. 2.

Pa., Lansdowne—Home—Until Aug. 14, by St. Vincents Home, 3-story, 40 x 360 ft., brick.

Wash., D. C. — (Official) — Parochial School—Until Aug. 14, by Holy Trinity Roman Catholic Congregation, 2-story, concrete and brick. About $140,000. F. G. Pierson, Washington Loan & Trust Bldg., archt. Noted July 19.

N. C., Raleigh—Administration, Kindergarten, etc. Until Aug. 16, by Bd. Dirs. State School for Blind, rein.-con. and brick, $150,000 appropriated. F. K. Thompson, Raleigh, archt.

Ind., Evansville—Junior High School—Until Aug. 13 by Bd. Educ., 2-story, 85 x 300 ft. About $100,000. A. Strause, pres. C. Shopbell & Co., 707 Furniture Ex. Bldg., archt. Noted July 12.

Ia., Spirit Lake—(Official)—Home—Until Sept. 15, by D. L. Clark, secy. bldg. com., Grand Commandery K. T. of Iowa, Newton, for dining-room and convention hall. About $60,000. Noted July 26.

S. D., Vermillion—Until Aug. 21, by Pres. of South Dakota University for engineering and women's buildings. Holmes & Flinn, 8 South Dearborn St., Chicago, archts.

S. D., Aberdeen—Dormitory—Until Aug. 13 by State Bd. Regents, Pierre, addition to Northern Normal and Indian School. About $125,000. G. Fossum, Van Slyke Bldg., archt. Noted Apr. 26.

Mo., Kansas City—Church—Until Aug. 20, by Trinity Methodist Congregation, 2-story, 60 x 150 ft. and wing, 48 x 5[illegible] ft. About $100,000. J. T. Bradley, Southwest Natl. Bank of Commerce, chn. bldg. com.

PRICES AND CONTRACTS AWARDED

★Mass., Fall River—Theater—N. Yannis, 78 Bedford St., let contract 1-story, 65 x 102 ft. to C. F. Grinnell & Co., 402 South Main St. About $60,000.

★Mass., Springfield—School—Bd. Educ. let contract, 2-story, 160 x 170 ft. Brookline and Greenwood Sts., to W. A. Newton & Co., 150 Birnie Ave. About $225,000.

★Mass., Taunton — High School — Bd. Educ. let contract 3-story, 157 x 20[illegible]-ft. brick addition, to Cunningham & Sons Constr. Co., 7 Water St., Boston, $220,000. Kilham & Hopkins, 9 Park St., Boston, archs.

★R. I., Providence—Hospital—Memorial Hospital let contract 40 x 146 ft. addition with 6 x 42 ft. ell on Prospect St. to Norcross Bros. Co., 830 Industrial Trust Bldg. About $60,000.

★N. Y., Niagara Falls — School — Bd. Educ. let contract, 2-story, 69 x 168 ft., to Laur & Mack, 1832 Pierce Ave. About $88,000.

★N. Y., Syracuse—School—Bd. Educ. let contract Edward Smith school to F. A. Caswell, Cahill Bldg. About $160,000.

★N. J., Bayonne—School—Bd. Educ. let contract new school on West 48th St. to Egan & Montague, 1 Montgomery St., Jersey City. About $232,946. Noted May 31.

★N. J., Trenton—Bank—Trenton Banking Co., 16 South Warren St., let contract 1-story, 64 x 100 ft. to S. W. Mather & Sons, Greenwood Ave. and Canal Sts. About $100,000.

★Pa., Lewistown—Y. M. C. A. Bldg. Com. let contract, 3-story, 80 x 140 ft. building to W. D. Steinbachs Sons, Market and Dorcas Sts. About $75,000. Noted May 3.

★Pa., Scranton — Almshouse — Blakely Poor Dist. let contract 2-story, 90 x 90-ft., Scott Twp. to L. T. Stipp, Union Bank Bldg. About $70,000.

★Wash., D. C.—Theater—T. Moore, c/o Garden Moving Picture Theater, 423 9th St., N. W., let contract, 1- and 2-story, 70 x 100 and 100 x 100 ft. to M. A. Weller Co., 816 14th St., N. W. About $250,000.

★S. C., Saluda—(Official)—Court House—County let contract to J. W. Stout, Sanford, N. C. About $60,000. Noted July 19.

★O., Cleveland—High School—Cleveland Catholic Diocese, care of Rev. J. P. Farrelly, East 9th and Superior Sts., let contract, 3-story, brick, Euclid and East 107th Sts., to G. A. Fuller & Co., Swetland Bldg., $200,000. Noted July 5.

★O., Cleveland — Welfare — Hydraulic Pressed Steel Co., 315 East 61st St., let contract brick and steel, to G. A. Rutherford, 2160 East [illegible]8th St. About $80,000.

★Ind., Gary — School and Church—St. Hedwig Congregation let contract 2-story, to J. Wasielewski, 1528 Madison St. About $50,000.

★Ill., La Salle—Hotel—F. W. Malthiessen, care of G. P. Blow, La Salle, let contract 3-story, 68 x 120 ft., to Krahl Constr. Co., 350 North Clark St., Chicago. About $130,000. Noted June 7.

★Ill., Riverside—Home—Illinois St. Andrews Society let contract rebuilding, 1- and 2-story, 34 x 118 ft. and 31 x 121 ft., to Thomson & Sons Co., 30 North LaSalle St., Chicago. About $100,000. Noted July 12.

★Wis., Barksdale — (Official) — School—Bd. Educ. let contract to Tomlinson & Egan, Ashland, on percentage leases. Noted July 19.

★Ia., Columbus Junction — School — Bd. Educ. let contract in Columbus Independent School Dist., brick to H. A. Beck, 1707 Mt. Pleasant St., Burlington. About $60,950. Noted June 28.

★Ia., Shenandoah.— **High School** — Bd. Educ. let contract brick, stone and rein.-con. to Getchell & Sugarman, Des Moines. About $140,000. Noted June 28.

Buildings (Continued)

★Ia., Sioux City—Courthouse—City let contract 4-story, 150 x 150-ft. brick to Splady, Albee & Smith, 1022 Plymouth Bldg., Minneapolis. About $500,000.

★Neb., Kearney—Hotel—North American Hotel Co. let contract 6-story, 75 x 90-ft. rein.-con. and brick to A. Schall, 6th and Jones St., Omaha. About $150,000.

★Ore., Portland—Store—L. Phillips, 1224 South Figueroa St., let contract, 3-story, 92 x 128-ft., rein.-con., to Kibach Co., Merchants National Bank Bldg. About $107,500.

★Que., Maisonville — School — Roman Catholic School Comrs., 87 Catherine St., let contract, stone and brick to J. A. Durocher, 291 Chambley St., $175,000.

FEDERAL GOVERNMENT WORK

Proposed Work

Me., Ft. Fairfield — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened July 20. Noted Aug. 2.

N. H., Portsmouth—Office Building—Bureau Yards and Docks, Navy Dept., Wash., rejected bids opened June 25. Noted July 5.

N. Y., New York—Storehouses—Bureau Yards and Docks (F. R. Harris, ch.) Navy Dept., Wash., plans to build, 3.

Pa., Phila. — Extension to Quartermaster's Depot—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., plans, at Marine Corps. About $235,000.

Wash., Puget Sound—(Bremerton P. O.)—Torpedo Station—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., plans.

BIDS DESIRED

Conn., New London—Storehouse—Until Aug. 20, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash.

N. Y., Long Island City—Post Office—Until Sept. 12, by J. A. Wetmore, superv. archt., treas. dept., Wash. About $160,000 available.

N. Y., New York—Electric Lighting System—Until Aug. 13, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., for electric lighting system in structural shop.

Pa., McKees Rocks—Post Office—Until Sept. 4, by J. A. Wetmore, superv. archt., treas., Wash.

Pa., Phila. — Quarters for Radio Operators—Until Aug. 20, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash.

Wash., D. C.—Magazine Storehouses—Until Aug. 27, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., building 2 magazine storehouses at Hingham, Mass., 2 at Lake Denmark, N. J., 1 at Ft. Mifflin, Pa., 1 at St. Juliens Creek, Va.

S. C., Charleston—Shell House, Torpedo Storehouse, Magazine Building—Until Aug. 25, by (F. R. Harris, ch.), Navy Dept., Wash., for 3 steel frame buildings, concrete foundations, terra cotta tile walls, etc.

S. C., Port Royal—Officers' Quarters—Until Aug. 20, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., for officers' quarters at Marine Recruiting Sta.

Ga., Washington — Post Office — Until Sept. 5, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Tenn., Memphis — Levee Work — Until Aug. 24, by Mississippi River Comn., U. S. Engr. Office, for building 3,400,000 cu.yd. earthwork, Upper and Lower St. Francis and White River Levee Dists.

Mich., Detroit—(Official)—Backfilling—Until Sept. 4, by U. S. Engr. Office, backfilling walls, 4th lock, St. Marys Canal; advertised in this issue.

Colo., Glenwood Springs — Post Office—Until Aug. 29, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Cal., San Francisco—(Official)—Dredging—Until Sept. 5, by U. S. Army Engr., 405 Custom House, dredging part of point off Dos Rios Island, etc.; advertised in this issue.

T. H., Kuahua—Mine Storehouse—Until Sept. 3, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. H., Portsmouth—Emergency Hospital—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., let contract to M. Kelly, Newport, cost plus percentage.

★Mass., Boston — Buildings — Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., let contract miscellaneous buildings at Bumkin Island, Boston Harbor, to E. Currier, 10 High St., Boston, $37,639.

★Mass., Watertown—Storehouse—Watertown Arsenal let contract 2-story, brick and steel, to Stone & Webster Engr. Corp., 147 Milk St., Boston, $70,000.

Mass., Winchester — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash. received low bids (a) limestone, (b) sandstone, from J. Miles & Co., 393 Main St., Worcester, (a) $58,470 (b) $59,900; L. F. Woodbury & Son, 400 Dorchester Ave., (a) $63,403 (b) $64,203; W. H. Fissell & Co., 1328 Bway., New York City, (a) $64,989 (b) $69,989. Noted July 5.

R. I., Melville—Extending Fuel-Oil Storage Plant—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., received low bids (a) excavation (b) concrete work (c) reinforcement (d) miscellaneous metal work (e) buildings (f) mechanical and electrical equipment (g) piping (h) tests (i) miscellaneous work from J. W. Danworth, 70 Ellicott St., Buffalo, (a) $1.40 (b) $16.00 (c) .0465 (d) 76c. (e) $9600 (f) $94,924 (g) $84,989 (h) $500; W. G. Cornell Co., 923 12th St., Wash., D. C., (a) $1.25 (b) $28.00 (c) .0625 (d) .15 (e) $10,000 (f) $100,000; Snare & Triest, Woolworth Bldg., New York City, (a) $2.00; (b) $19.00 (c) .065 (d) .40 (e) $15.00 (f) $162,000 (g) $162,500 (h) $5000. Noted July 26.

★R. I., Newport—Primer Filling House—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., let contract to Hyde & Baxter, Albany, $78,890. Noted July 12.

★Pa., Monessen—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to W. H. Fissell & Co., 1328 Bway., New York City, $57,000. Noted July 26.

Pa., Phila. — Crematory — Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., received low bids building crematory (work complete) from Metzger & Fisher, Otis Bldg., Phila., $12,926, 75 days; W. Linker, 9th and Cherry St., $13,922, 130 days; W. W. Austin & Co., 3028 North 16th St., $14,664, 180 days. Noted July 19.

Pa., Phila. — Cranes — Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., received low bids for electric traveling cranes for Smithery addition, at Navy Yard (work complete) from Morgan Eng. Co., Alliance, O., $52,125; Niles-Bement & Pond, 111 Broadway, New York City, $108,610.

Wash., D. C.—Coal Handling Plants—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., received low bids (a) navy yard, Norfolk, (b) Philadelphia as follows: Wellman, Seaver & Morgan, 7000 Central Ave., Cleveland, $135,600, both items, 365 days; Brown Hoisting & Machine Works, 4403 St. Clair Ave., Cleveland, (a) $58,000, 150 to 180 days; Bergen Point Iron Works, Foot West 5th St., Bayonne, N. J., (a) Link belt equipment, $114,985; Jeffery equipment, $101,875, 210 days; (b) Link belt equipment, $113,689, 210 days, Jeffery equipment, $100,795, 210 days; (a) and (b) Link belt $224,674, Jeffery $198,670; 250 days. Noted July 19.

★Va., Norfolk—Heating System Foundry and Machine Shop—Bureau Yards and Docks, Navy Dept., Wash., let contract to H. E. Crook Co., Baltimore, $71,945.

★S. C., Columbia—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to W. H. Maxwell, Lake Chelan, Wash., $241,440.

★Miss., Vicksburg—Levee Work — 3rd Mississippi River Dist. let contract 1,265,000 cu.yd. levee work on Arkansas River to Hensel Co., Ltd., New Orleans, 23.3 per cu. yd. Noted June 21.

★Tenn., Gallatin—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to R. P. Farnsworth & Co., Owensboro, Ky., $37,500. Noted Aug. 2.

Neb., Chadron—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids from C. E. Goodhand, Wahoo, $89,283; G. A. Shaul, Seneca, Kan., $93,034; J. H. Wiese, 1301 City Natl. Bank Bldg., Omaha, $94,350. Noted July 5.

★Tex., Vernon—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to W. D. Lovell, Minneapolis, $41,700. Noted Aug. 2.

Wash., Keyport — Tanks and Towers — Bureau Yards and Docks. (F. R. Harris, ch.), Navy Dept., Wash., received low bids for 2 steel water tanks and towers at torpedo station (work complete) from Omaha Structural Steel Co., 420 Bee Bldg., Omaha, $15,900; 135 days; Pittsburgh Des Moines Steel Co., Phila., $18,400; 160 days; Chicago Bridge & Iron Co., 37 West Van Buren St., Chicago, $18,675, 1st tank 120 days, 2nd tank 250 days. Noted July 12.

Cal., Mare Island — (Vallejo P. O.) — Cranes—Bureau Yards and Docks, (F. R Harris, ch.), Navy Dept., Wash., received low bids furnishing (a) 1 40-ton and 1 15-ton crane (b) net price, 1 40-ton crane complete; from Morgan Engr. Co., Alliance, O., (a) $38,950, (b) $25,175, 240 to 270 days; Niles-Bement & Pond, 111 Bway., New York City, (a) $47,000 (b) $28,300, 390 days. Noted July 12.

★Cal., Palo Alto — Cantonment — N. D. Baker, secy. war, let contract to Lindgren Co., San Francisco, cost plus percentage.

MISCELLANEOUS

Proposed Work

★Park Improvements—Brooklyn, N. Y.—Park Bd. let contract improving Prospect Park Plaza at main entrance, to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $52,533.

Pier—Phila., Pa.—City purchased site on Delaware River at Delaware Ave. and plans to build pier.

Harbor Improvements — Mobile, Ala.—City election Aug. 13 to vote on $600,000 bonds for harbor improvements at Arlington site. W. Smith, city engr.

Bay St. Louis, Miss.—Sea Wall—City voted $200,000 bonds to build sea wall.

River Terminals—Memphis, Tenn.—City election Aug. 16th to vote on $5,000,000 bonds to build river terminals. J. H. Weathersford, city engr.

Disposal Plant—Salem, O.—City preparing plans to rebuild disposal plant. About $200,000. W. Skelton, city engr.

Dock—Detroit, Mich.—City plans, at foot of 24th St. R. H. McCormick, city engr.

Breakwater—Kenosha, Ill.—Council appropriated $45,000 to reclaim land to north and south of city and to build new breakwater.

Elimination of Grade Crossings—Moline, Ill.—Chicago, Rock Island & Pacific R.R., Chicago, Burlington & Quincy R.R. and City plan to eliminate grade crossings on various streets. C. A. Morse, Chicago, ch. engr. former, A. W. Newton, Chicago, ch. engr. latter. L. Payton, city engr.

Park Improvements — Peoria, Ill. — Pk. Bd. appropriated $35,000 to improve Glen Oak Park, $22,000 Bradley Park, $8000 South Park, $15,000 Grand View Dr., $13,000 Madison Park. L. D. Jeffries, city engr.

Snow Sheds—Rock River, Wyo.—Union Pacific R.R. let contract concrete lumber snowsheds near Rock River and other Wyoming points to Houghton Constr. Co., San Francisco, $1,000,000.

Canal Work—Twin Falls, Idaho—(Official)—Until Aug. 14, by Secy. Twin Falls Canal Co., for concrete structures and enlarging 4 mi. Lower Line Canal.

Pavilion and Pier—Huntington Beach, Cal.—City preparing plans for pavilion and rein.-con. pier. Bonds for $80,000 bonds voted for work.

Canal—San Francisco, Cal.—L. F. Swift, Union Stock Yards, Chicago, plans, 16 ft. deep, also inland turning basin to improve 4000-acre industrial, manufacturing and warehouse site. About $1,000,000.

Dock and Wharf—Amherstburg, Ont.—Brunner Mond Co. preparing plans, rein.-con. About $50 000. G. MacGregor, mgr.

BIDS DESIRED

Timber Bulkhead—Albany, N. Y.—(Official)—Until Aug. 13, by L. W. Stotesbury, adjutant gen., building timber bulkhead; advertised in this issue.

Dam—Buffalo, N. Y.—Until Aug. 16 by Dept. Parks and Pub. Bldg., building rein.-con. dam over Cazenovia Creek, Cazenovia Park. Address J. F. Malone.

Retaining Walls — Tekamah, Neb. — See "Bridges."

Retaining Wall—Santa Barbara, Cal.—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Docks and Warehouse—Orange, Tex.—City let contract to Austin Bros., 1815 Coomb St., Dallas, $24,000.

★Gas Main—Loco, Okla.—Lone Star Gas Co., 1st Natl. Bank Bldg., Ft. Worth, let contract to lay 16-in. natural-gas main from Loco, Okla., to Gainesville, Tex., to J. E. Pherson. Noted May 24.

Transmission Line—Sherbrooke, Que.—(Official) — City soon lets contract for transmission line from Sherbrooke to power plant, at Two Mile Falls. Noted July 19.

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until August 21, 1917.

Frankford Elevated Railway

DEPARTMENT OF CITY TRANSIT
754 BOURSE BUILDING
Philadelphia, August 7, 1917.

Sealed proposals, properly indorsed and addressed to the undersigned at the office above mentioned, will be received until 12 o'clock noon, on Tuesday, August 21, 1917, and opened immediately thereafter, for the following work appurtenant to the Frankford Elevated Railway, authorized by Ordinances of Councils approved July 2, 1915, July 20, 1916 and March 6, 1917:

CONTRACT NO. 524—Steel frame work and railings, concrete floors and parapets side enclosures, roofs, drain gutters and spouts for ten (10) station platforms and connecting passages or foot bridges between station platforms and station buildings at Allegheny Avenue, Tioga Street, Torresdale Avenue, Ruan-Church Streets and Orthodox-Margaret Streets.

Plans and specifications can be seen at Room 748, Bourse Building, and copies of same with blank forms for proposals will be supplied to intending bidders upon deposit of $10 (cash or certified check), which will be refunded upon return of plans.

Bidders must be skilled and regularly engaged in this class of work.

No bid will be considered unless accompanied by a certificate from the City Solicitor that a proposal bond in the sum of five hundred dollars ($500) has been filed in accordance with the provisions of an ordinance approved May 25, 1860.

The Director reserves the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

WM. S. TWINING,
Director.

Bids received until August 20, 1917.

Filter Bed and Appurtenances

New Canaan, Conn.

Sealed proposals will be received by the Board of Warden and Burgesses of the Borough of New Canaan, at the office of the Borough Clerk, on or before Monday, August 20, 1917, at 8 P. M., for the construction of an emergency filter bed and appurtenances, renewal of Beds Nos. 1, 2 and 3, and such other additions and alterations designated on the plan for the Borough of New Canaan, Conn., at their sewage disposal plant. Plans and specifications may be secured at the office of the Clerk, John E. Hersam, 9 Railroad Avenue, New Canaan, Conn., or the office of the Engineer, W. H. Arthur, 1 Bank Street, Stamford, Conn. The Board of Warden and Burgesses reserves the right to reject any or all bids.

Per Order of the Board of Warden and Burgesses. JOHN E. HERSAM, Clerk.

Dated at New Canaan, Conn., August 8, 1917.

Bids received until Aug. 20, 1917.

Surface Treatment

Swarthmore, Pa.

Bids will be received until August 20, 1917, at the Borough Hall for 10,000 yd. surface treatment for macadam roads.

PROPOSALS

Bids received until August 20, 1917.

Outfall Sewer, etc.

Scotia, N. Y.

Notice is hereby given that sealed proposals will be received by the Board of Trustees of the Village of Scotia, N. Y., at the office of the village clerk in said village, until 8:00 o'clock P.M. on the 20th day of August, 1917, for the construction of a screening chamber and outfall sewer, in accordance with plans and specifications on file in the office of the Village Clerk.

All bids must be made upon printed forms to be obtained of the Village Clerk at the Village Hall, Scotia, N. Y.

All bids must be written in words and figures, and accompanied by a certified check, payable to the order of the Treasurer of the Village of Scotia, for ten (10%) per cent. of the amount of the bid.

All bids must be enclosed in a sealed envelope, directed to the Board of Trustees of the Village of Scotia, N. Y., and endorsed upon the outside of the envelope "Proposal for Screening Chamber and Outfall Sewer."

The Board of Trustees reserves the right to reject any or all bids or proposals.

By order of the Board of Trustees of the Village of Scotia, N. Y.

E. CROSBY HOYT,
Village Clerk.

Dated Village of Scotia, N. Y., this 7th day of August, 1917.

Note: Outfall sewer composed of approximately 2400 feet of 18" vitrified pipe.

W. W. CHADSEY, Engineer.

Bids received until August 20, 1917.

Notice to Paving Contractors

Elmira, N. Y.

Sealed proposals for grading, curbing and paving the below named street will be received by the undersigned at his office in the City Hall until 11 a.m. August 20, 1917: East and West Gray Streets, from west line Baldwin Street to east line Main Street, about 2400 square yards.

Plans and specifications are on file in the City Engineer's office, City Hall, where also may be obtained the "proposal blanks," which must be used.

A certified check for $1250 payable to the order of the Mayor of Elmira, N. Y., is required and must accompany the bids. It will be returned to the bidder upon execution of the contract.

The Board of Public Works reserves the right to reject any or all bids.

LOUIS C. ANDREWS, City Clerk.

Plans received until August 15, 1917.

Building Plans

Voluntary competitive plans for a Knights of Columbus Building will be received on or before 10:00 A.M. Wednesday, August 15th, 1917. The right is reserved to reject all drawings submitted. All information may be obtained from Thomas F. Feeley, 904 East 20th St., Chester, Pennsylvania.

PROPOSALS

Bids received until August 29, 1917.

Centrifugal Pumps, etc.

Jackson, Mich.

Sealed Proposals will be received at the office of the City Manager, Jackson, Mich., until 12 o'clock noon of Wednesday, Aug. 29th, 1917, for the construction, delivery and erection of one (1) steam driven vertical, centrifugal pump, one (1) or more electrically driven deep well pumps, and two (2) electrically driven horizontal centrifugal pumps for the City Water Works.

Each proposal must contain the full name of the party or parties making same and must be accompanied by a certified check for ten per cent. (10%) of the greatest amount bid as a guarantee that if the proposal is accepted the contract will be entered into. Said check shall be forfeited to the City if the bidder fails to execute the contract within ten (10) days after notice of award.

Plans, specifications and blank forms of proposals and contract may be obtained at the office of the Superintendent of Water Works of the City of Jackson, Michigan, or at the office of Seabury G. Pollard, Consulting Engineer, 3422 Burch Avenue, Cincinnati, Ohio, by making a deposit of Ten Dollars ($10), which will be refunded upon their return in good condition.

The right is reserved to reject any and all bids.

A. W. D. HALL,
City Manager.

OSCAR E. BULKELEY,
Superintendent Water-Works.
ated August 3rd, 1917.

Engine and Pump

The City of Frederick, Oklahoma, will install one steam engine, 250-hp., 125 lb. steam pressure, not to exceed 200 r.p.m. noncondensing, steam consumption not more than 25 lb. per i.hp. when running at half load. Engine to pull 150-kw. generator, 2200-volt, 3-phase, 48 amperes, 50 per cent. P. F.

One centrifugal pump, 2-stage, direct connected to motor, maximum capacity 20,000 gallons per hour against a 16′ lift and 65-pound head. One pump of same capacity, either steam plunger or turbine type, to be used as emergency. Address communications City Clerk, Frederick, Oklahoma.

HENRY A. PRESSEY,
City Hall, Oklahoma City, Oklahoma.

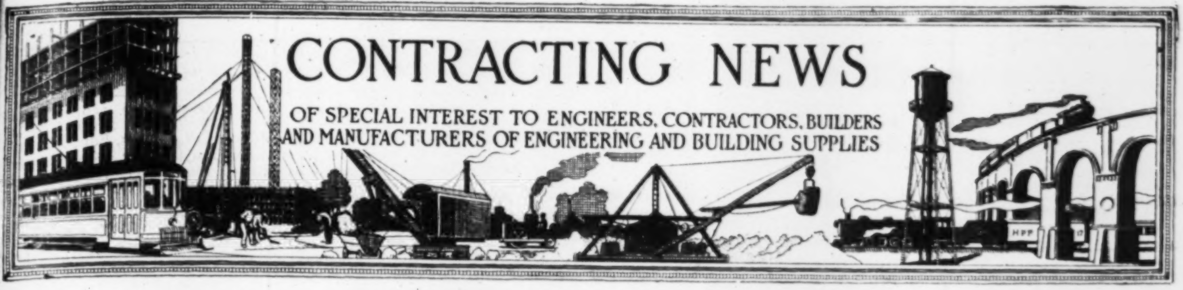
Bids received until August 17, 1917.

Concrete Bridge

Hampton, N. Y.

Bids will be received by the undersigned until two o'clock P.M., August 17th, at the Town Hall in Hampton, N. Y., for the construction of a steel reinforced-concrete arch bridge across the Poultney River at Leonard's. Plans and specifications can be obtained at the Allen Bank in Fair Haven, Vt., or at the town clerk's office. Hampton, N. Y. The right to reject any or all bids is reserved.

E. S. DOUGLASS,
Supt. Highways, Hampton, N. Y.
SELECTMEN, Fair Haven, Vt.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 46 to 51 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Aug. 20.	Cumberland, Md. Advertised Aug. 2 to Aug. 16.	Aug. 9
Aug. 20.	Chicago Heights, Ill.	Aug. 9
Aug. 20.	New York, N. Y.	Aug. 16
Aug. 21.	Boston, Mass.	Aug. 16
Aug. 22.	Jackson, Mich. Adv. Aug. 16.	Aug. 16
Aug. 23.	Akron, O.	Aug. 16
Aug. 25.	San Francisco, Cali	Aug. 2
Aug. 27.	Ottawa, Ont.	Aug. 16
Sept. 3.	Burlingame, Kan.	Aug. 16
Sept. 4.	Hamilton, Ont.	Aug. 16
Sept. 4.	Cumberland, Md. Adv. Aug. 9 and 16.	Aug. 9
Sept. 6.	Brockton, Mass. Adv. Aug. 16.	Aug. 16
Sept. 6.	Thomson, Ill. Adv. Aug. 16.	Aug. 16
Sept. 10.	Cumberland, Md. Adv. Aug. 16.	Aug. 16
Sept. 11.	New York, N. Y. Adv. July 12 and Aug. 16.	July 12

SEWERS

Bids Close		See Eng. News-Record
Aug. 16.	Cincinnati, O.	Aug. 16
Aug. 17.	Beloit, Wis.	Aug. 16
Aug. 18.	Bowling Green, O.	Aug. 16
Aug. 18.	Muncie, Ind.	Aug. 16
Aug. 20.	Camden, N. J.	Aug. 16
Aug. 20.	New Hampton, N. Y.	Aug. 9
Aug. 20.	Milford, Ia.	Aug. 9
Aug. 20.	New Haven, Conn.	Aug. 16
Aug. 20.	Marshalltown, Ia.	Aug. 16
Aug. 21.	Chicago, Ill.	Aug. 16
Aug. 21.	Seymour, Ia.	Aug. 16
Aug. 21.	Salt Lake City, Utah	Aug. 16
Aug. 21.	Columbus, O.	Aug. 16
Aug. 21.	Sharon, Pa.	Aug. 16
Aug. 22.	San Francisco, Cal.	Aug. 16
Aug. 24.	Cleveland, O.	Aug. 16
Aug. 30.	Mora, Minn.	Aug. 16
Sept. 4.	Cumberland, Md. Adv. Aug. 9 and 16.	Aug. 9
Sept. 15.	Hillsboro, Ill.	Aug. 16

BRIDGES

Bids Close		See Eng. News-Record
Aug. 17.	Somerville, N. J.	Aug. 16
Aug. 17.	Hampton, N. Y. Adv. Aug. 16.	Aug. 16
Aug. 20.	Angola, Ind.	Aug. 9
Aug. 22.	Troy, O.	Aug. 2
Aug. 24.	Spokane, Wash.	Aug. 16
Aug. 25.	Martinsburg, W. Va.	Aug. 9
Aug. 27.	Elberton, Ga.	Aug. 2
Aug. 28.	Hohenwald, Tenn.	Aug. 16
Aug. 28.	Rockville, Ind. Adv. Aug. 16.	Aug. 16
Aug. 28.	Channahon, Ill. Adv. Aug. 16.	Aug. 16
Aug. 29.	Columbus, O.	Aug. 16
Aug. 30.	Kankakee, Ill.	Aug. 2
Sept. 1.	Annapolis, Md.	Aug. 16
Sept. 1.	New Martinsburg, W. Va.	Aug. 16
Sept. 4.	Williamsport, Pa. Adv. Aug. 16.	Aug. 16
Sept. 11.	Bradentown, Fla.	Aug. 16

STRUCTURAL STEEL WORK

Bids Close		See Eng. News-Record
Aug. 21.	Albany, N. Y. Adv. July 26 and Aug. 2.	July 26

REINFORCED CONCRETE

Bids Close		See Eng. News-Record
Aug. 22.	Beatrice, Neb.	July 19

STREETS AND ROADS

Bids Close		See Eng. News-Record
Aug. 20.	Indiana	July 26
Aug. 20.	Indiana	Aug. 16
Aug. 20.	Washington	Aug. 2
Aug. 20.	Dubuque, Ia.	Aug. 9
Aug. 20.	St. Paul, Minn.	Aug. 9
Aug. 20.	California	Aug. 9
Aug. 20.	Nebraska City, Neb.	Aug. 9
Aug. 20.	Salmon, Idaho	Aug. 9
Aug. 20.	Louisiana	Aug. 16
Aug. 20.	Connecticut	Aug. 16
Aug. 20.	New York, N. Y.	Aug. 16
Aug. 20.	Muskegon, Mich.	Aug. 16
Aug. 20.	Danville, Ill.	Aug. 16
Aug. 20.	Sheridan, Wyo.	Aug. 16
Aug. 20.	Dorchester, Mass.	Aug. 16
Aug. 20.	Jefferson, Ia.	Aug. 16
Aug. 21.	Cape May, N. J.	Aug. 16
Aug. 21.	Salt Lake City, Utah	Aug. 16
Aug. 21.	Stone Harbor, N. J.	Aug. 2
Aug. 21.	Billings, Mont.	Aug. 9
Aug. 21.	Seattle, Wash.	Aug. 9
Aug. 21.	Jersey City, N. J.	Aug. 9
Aug. 21.	Massachusetts	Aug. 16
Aug. 22.	Baltimore, Md.	Aug. 16
Aug. 22.	Amite, La.	Aug. 16
Aug. 22.	Beloit, Wis.	Aug. 16
Aug. 22.	Oxford, O.	Aug. 16
Aug. 23.	Fulton, N. Y. Adv. Aug. 9.	Aug. 9
Aug. 23.	Burlington, Ia.	Aug. 16
Aug. 24.	Escanaba, Mich.	Aug. 16
Aug. 24.	Pennsylvania	Aug. 9
Aug. 24.	Uniontown, Pa.	Aug. 9
Aug. 24.	Lancaster, O.	Aug. 16
Aug. 25.	Indiana	Aug. 16
Aug. 27.	California	Aug. 16
Aug. 27.	Indiana	Aug. 16
Aug. 27.	Newark, N. J.	Aug. 2
Aug. 27.	Portland, Me.	Aug. 9
Aug. 27.	New Brunswick, N. J.	Aug. 16
Aug. 27.	Elizabeth, N. J.	Aug. 16
Aug. 27.	Little Falls, N. J.	Aug. 16
Aug. 27.	Los Angeles, Cal.	Aug. 16
Aug. 27.	St. Paul, Minn.	Aug. 16
Aug. 28.	Farmville, Va.	Aug. 16
Aug. 30.	New Brunswick, N. J.	Aug. 16
Aug. 30.	Oklahoma, Okla.	Aug. 9
Aug. 30.	Indiana	Aug. 16
Aug. 30.	Kingsport, Tenn.	Aug. 16
Aug. 30.	Pennsylvania Adv. Aug. 16.	Aug. 16
Sept. 1.	Scotsboro, Ala.	Aug. 16
Sept. 4.	Pittsburgh, Pa.	Aug. 16
Sept. 4.	Columbus, O.	Aug. 16
Sept. 4.	New Brunswick, N. J.	Aug. 16
Sept. 4.	Yazoo City, Miss.	Aug. 16

RAILWAYS

Bids Close		See Eng. News-Record
Aug. 30.	Pennsylvania Adv. Aug. 16.	Aug. 16

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Aug. 18.	Mora, Minn.	Aug. 16
Aug. 20.	Des Moines, Ia.	July 26
Aug. 20.	Owatonna, Minn.	Aug. 9
Aug. 20.	Glenwood, Minn.	Aug. 16
Aug. 20.	Greenock, Ont.	Aug. 16
Aug. 21.	Parton, Ill.	Aug. 9
Aug. 21.	Albany, N. Y. Adv. Aug. 16.	Aug. 16
Aug. 22.	Lamar, Colo.	Aug. 16
Aug. 22.	Sac City, Ia.	Aug. 16
Aug. 22.	Spencer, Ia.	Aug. 16
Aug. 24.	Memphis, Tenn.	Aug. 2
Aug. 28.	Winston-Salem, N. C.	Aug. 16
Aug. 30.	Detroit, Minn.	Aug. 16
Aug. 30.	Tallahassee, Fla.	Aug. 16
Oct. 2.	St. Cloud, Minn.	Aug. 2

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Aug. 20.	New Hampton, N. Y.	Aug. 9
Aug. 31.	Seattle, Wash.	Aug. 16
Sept. 4.	Columbus, O.	Aug. 16

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 20.	Brooklyn, N. Y.	Aug. 9
Aug. 20.	Tulsa, Okla.	Aug. 16
Aug. 21.	Laconia, N. H.	Aug. 16
Aug. 21.	York, Neb.	Aug. 16
Aug. 21.	Fairmont, Minn.	Aug. 16
Aug. 21.	Boston, Mass.	Aug. 16
Aug. 22.	Mattapan, Mass.	Aug. 9
Aug. 22.	Greensboro, N. C.	July 26
Aug. 22.	Modesto, Cal.	Aug. 2
Aug. 22.	Hamden, Conn.	Aug. 16
Aug. 23.	Boston, Mass.	Aug. 16
Aug. 23.	Raleigh, N. C.	Aug. 16
Aug. 24.	Mingo, Ia.	Aug. 16
Aug. 24.	New Brunswick, N. J.	July 26
Aug. 28.	Detroit, Mich.	Aug. 2
Aug. 28.	Dike, Ia.	Aug. 16
Aug. 28.	Hudson, Wis.	Aug. 16
Aug. 30.	Conde, S. D.	Aug. 16
Aug. 30.	Columbus, O.	Aug. 16
Aug. 30.	London, O.	Aug. 16
Sept. 1.	Lincoln, Neb.	Aug. 16
Sept. 1.	Elmira, N. Y.	Aug. 9
Sept. 1.	Milwaukee, Wis.	Aug. 9
Sept. 4.	Lakewood, O.	Aug. 16
Sept. 5.	Newton, Ia.	Aug. 16
Sept. 5.	Brooklyn, N. Y.	Aug. 16
Sept. 15.	Oklahoma, Okla.	Aug. 16
Sept. 15.	Spirit Lake, Ia.	Aug. 9

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Aug. 20.	Washington, D. C.	Aug. 2
Aug. 20.	Phila., Pa.	Aug. 9
Aug. 20.	New London, Conn.	Aug. 9
Aug. 20.	Port Royal, S. C.	Aug. 9
Aug. 20.	Brooklyn, N. Y.	Aug. 16
Aug. 20.	Buffalo, N. Y. Adv. Aug. 16.	Aug. 16
Aug. 21.	Grand Haven, Mich. Adv. July 26 and Aug. 2.	July 26
Aug. 21.	Kendallville, Ind.	Aug. 16
Aug. 21.	Wash., D. C. Adv. Aug. 16.	Aug. 16
Aug. 24.	Memphis, Tenn. Adv. Aug. 16.	Aug. 9
Aug. 24.	Cohoes, N. Y.	Aug. 16
Aug. 25.	Charleston, S. C.	Aug. 9
Aug. 27.	Hingham, Mass.	Aug. 9
Aug. 27.	Washington, D. C.	Aug. 9
Aug. 27.	Phila., Pa.	Aug. 16
Aug. 28.	Detroit, Mich.	Aug. 2
Aug. 29.	Glenwood Springs, Colo.	Aug. 9
Aug. 30.	Franklin, Pa. Adv. July 26 and Aug. 2.	July 26
Aug. 31.	San Pedro, Cal.	Aug. 16
Sept. 3.	Kuahua, T. H.	Aug. 9
Sept. 4.	McKees Rock, Pa.	Aug. 9
Sept. 4.	Detroit, Mich. Adv. Aug. 9 and 16.	Aug. 9
Sept. 5.	Torrington, Wyo. Adv. July 26.	July 26
Sept. 5.	Washington, Ga.	Aug. 2
Sept. 5.	San Francisco, Cal. Adv. Aug. 9 and 16.	Aug. 9
Sept. 5.	Wash., D. C. Adv. Aug. 16.	Aug. 16
Sept. 6.	Forsyth, Ga.	Aug. 2
Sept. 12.	Long Island City, N. Y.	Aug. 9
Sept. 21.	Kendallville, Ind. Adv. Aug. 16.	Aug. 16

MISCELLANEOUS

Bids Close		See Eng. News-Record
Aug. 20.	Retaining Wall, Lebanon, O.	Aug. 16
Aug. 21.	Piers—Albany, N. Y. Adv. July 26 and Aug. 2.	July 26
Aug. 21.	Electric Railway — Phila., Pa. Adv. Aug. 16.	Aug. 16
Aug. 22.	Tunnels—San Francisco, Cal. Adv. July 19 and Aug. 9 and 16.	July 19
Aug. 25.	Incinerator—Paducah, Ky.	Aug. 2
Aug. 31.	Breakwater — St. John Harbour, N. B.	Aug. 16

WATER-WORKS

Proposed Work

Ga., Atlanta—City plans to build 48-in. concrete aqueduct 40-mi. long, gravity pressure to improve pumping plant. About $8,000,000. W. M. Gipp, city supt.

O., Dayton—(Official)—City rejected bids building 10,000,000-gal. reservoir in southeastern part of city.

Ill., New Athens—City voted $80,000 bonds to build water-works system. H. Kaiser, city supt.

Wis., Campbellsport—Village plans to install waterworks station and sewerage system.

Wis., Niagara—City defeated $35,000 bond issue to build water-works system. Noted Aug. 2.

Kan., Chanute — Atchison, Topeka & Santa Fe R.R. to build water-works plant in Neosho River to supply its engines at Chanute. About $82,000. R. A. Rutledge, Topeka, ch. engr.

Kan., Eureka—City plans to build waterworks improvements. About $30,000. Black & Veatch, 507 Inter-State Bldg., Kansas City, Mo., engrs.

Kan., Kansas City—City having plans prepared 10,000,000 gal. reservoir, Argentine Hill. L. H. Chapman, comr. light and water.

Neb., Omaha—City plans to extend waterworks line from Albright to Ft. Crook. Address City Engr., Bruce.

S. D., Centerville—City election Aug. 17 to vote on $20,000 bond issue to install waterworks system.

Mont., Ronan—City voted $16,000 bonds to build waterworks system.

Mo., ~~Riverview Gardens~~—(St. Louis P. O.)—Sikking & Beckwith, agts. Riverview Gardens Realty Co., soon let contract, 3 mi., laying water pipes.

Tex., Rosebud — (Official)—City to sell $16,500 bonds to build waterworks. Z. A. Booth, mayor.

Tex., Wharton — See "Excavation and Dredging."

Okla., Frederick—(Official)—City plans to install 1 steam engine, 1 centrifugal pump. H. A. Pressey, city clk. Advertised in this issue.

Okla., Granite—City election Aug. 20, to vote on bond issue to build waterworks system. H. Arnett, city supt.

Okla., New Wilson—City plans to improve waterworks system. About $10,000.

Okla., Wilburton—City soon lets contract concrete dam and reservoir for waterworks.

Okla., Woodward—See "Sewers."

Idaho, Boise—City soon lets contract repairing flume south of Warm Springs Ave., Cottonwood Gulch and Hull's Gulch, wooden or concrete flumes. About $15,000. J. L. Niday, 307 Overland Bldg., gen. mgr.

Wash., Seattle — City lets contract in October, building 40,000,000 gal. concrete reservoir in Volunteer Park. About $350,000; also 3 dams, concrete core walls at Swan Lake, first unit of over $3,000,000 worth improvements to be made this year. L. B. Youngs, supt. water. Noted July 26.

Wash., Tacoma—Pierce Co. Comn. granted franchise to F. C. Ross to build waterworks system on tide-flats. About $25,000. J. Nichol, city supt.

Ore., Oswego—Pub. Serv. Comn. ordered Oswego Lake Water, Light & Power Co. to improve waterworks system, including building steel or cement caisson around spring, auxiliary pump and other additions to pump made, liquid chlorine purification system installed.

Cal., Corona—Kincheloe Ranch having plans prepared by A. C. Brawner, Higgins Bldg., Los Angeles, water-works system, including tunnels, submerged dams, and 3 mi. pipe line.

Cal., Filmore—City plans to build waterworks plant. Address City Clk.

Cal., Fresno—Fresno Co. Comrs. granted franchise to A. Votaw, building, operating and maintaining waterworks system, Navelecia.

Ont., Aylmer—Carnation Milk Products Co., Ltd., soon lets contract, reservoir. About $25,000. W. H. Robinson, Aylmer, engr.

BIDS DESIRED

Mass., Boston—Until Aug. 21, by Comn. Waterways and Public Lands, 473 State House, 6 oil pressure operated sluice gates, 6 ~ 8 ft. each. J. N. Cole, chn. F. W. Hodgson, engr.

Mass., Brockton—(Official)—Until Sept. 6 by Sewerage Comn. furnishing 3 centrifugal pumps, 2 oil storage tanks, 3 fuel oil engines. A. F. Nordbeck, chmn. Advertised in this issue.

N. Y., New York—Until Aug. 20, by R. C. Harrison, comr. docks, Pier "A," Battery Pl., paving Marginal St. between West 44th and West 47th St., granite block, concrete foundation.

Md., Cumberland—(Official)—Until Sept. 10, by Evitts Creek Water Co., Cumberland, building additions to filtration plant. J. H. Fuertes, engr. Advertised in this issue.

O., Akron—(Official)—Until Aug. 23, by C. F. Beck, dir. pub. serv., Cont. No. 80, furnishing about 200 fire hydrants of from 6 to 8 in. Cont. No. 86, furnishing water meters about 5000 ⅝-in., 210 ¾-in. to 2-in.

Mich., Jackson—(Official)—Until Aug. 29, by A. W. D. Hall, city mgr., building steam driven vertical, centrifugal pump 1 or more electrically driven deep well pumps and 2 electrically driven horizontal centrifugal pumps. Advertised in this issue.

Ill., Thomson—(Official)—Until Sept. 6, by F. J. Stransky, atty. Savanna and York Drain. Dist., Dist. Savanna, building pump house etc. N. D. French, secy. Advertised in this issue.

Minn., Mora—See "Sewers."

Kan., Burlingame—Until Sept. 3, by City, waterworks improvements. About $11,400. W. E. Estep, city supt.

Ont., Hamilton—(Official)—Until Sept. 4 (change of date) by city installing machinery, Beach Pumping Station. Noted July 26.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contract laying water pipes, flexible steel joints, Boston Harbor between Long and Spectacle Island, to Bay State Dredging & Contg. Co., 247 Atlantic Ave., $19,610.

★N. Y., New York—(Official)—Bd. Water Supply, Municipal Bldg., let contract, furnishing and delivering gate and pressure-regulating valves, etc., to Coffin Valve Co., Neoponset St., Boston, $147,219. Noted July 26.

★N. Y., Wyantskill — Rensselaer Co. Tuberculosis Hospital let contract waterworks system to Hyde & Baxter, 351 Madison Ave., Albany, $30,300. Noted May 24.

★O., Akron—City let contract, filtration plant to New York Continental Jewell Filter Co., 15 Broad St., New York City, $190,202; pipe, 30-in. main, portions East Buchtel Ave., to R. D. Wood & Co., Akron, smaller main pipes to Hardware Supply Co., Akron, $87,618. Noted June 21.

★O., Toledo—City let contract 30,000,000 gal. steam turbine centrifugal pump to Dravo-Doyle Co., Citizens Bank Bldg., $71,495; 225-ft. radial brick chimney to W. Hawley & Co., Toledo, $15,831; 2 automatic stokers to Sanford Riley Stoker Co., Worsenter, Mass., $8250.

★Wis., Whitefish Bay—City let contract waterworks system, laying 23,000 ft. waterworks pipe to J. M. Donahue, Stevens Point, $65,000.

★Kan., Chanute—City let contract filtration plant, 2,000,000 gal. capacity to Chanute Constr. Co., Chanute, $100,000. Noted June 28.

★Kan., Hays—City let contract machinery equipment water-works system to Merkle-Hines Machinery Co., 508 Inter-State Bldg., Kansas City, Mo., $33,000; building and chimney to A. Jacobs, Hays, $12,000.

★Okla., Lawton—City let contract, pipe line from Lake Lawtonka, to Cannady Constr. Co., Tulsa, $75,000. Noted July 19.

★Okla., Tulsa—City let contract waterworks improvements to Fogel Constr. Co., 515 Reliance Bldg., Kansas City, Mo., $666,000. Noted June 21.

★Okla., Tulsa—City let contract, laying 55,512 ft. of from 14- to 24-in. pipe from Lake Law-ton-ka to Ft. Sill and Lawton, to Cannady Constr. Co., Tulsa, $75,000. Noted July 26.

★Que., Montreal South—City let contract, water mains, valves, hydrants, sewers and manholes to J. Toussaint & Cie., Ltd., 83 Craig St., W., elevated steel tanks for waterworks to Chicago Bridge & Iron Works, 37 West Van Buren St., Chicago. About $180,000. Noted May 10.

SEWERS

Proposed Work

N. Y., Altamont—(Official)—Village soon lets contract building sewers and sewage disposal plant. W. W. Chadsey, 20 Swan St., Schenectady, engr.

N. Y., Scotia—Village voted $12,000 bonds to build sewage disposal plant.

N. J., South Orange—9 municipalities plan to build trunk line sewer. About $643,312. Address I. C. Dilks, South Orange.

Pa., Pittsburgh—City had plans prepared building alterations to sewage disposal plant. About $40,000. W. Skelton, city engr.

Ga., Savannah—Fort Wentworth Terminal Corp., 61 Broadway, New York, plans to build sewers, Port Wentworth. About $50,000. C. W. Leavitt, 220 Bway., New York, engr.

Fla., Palm Beach—Town voted $50,000 bonds to improve sewerage system. Address Town Clk.

Tenn., Nashville—City election Sept. 29 to vote on $1,000,000 bond issue to construct sewerage system. W. W. Southgate, city engr.

O., Canton—City to sell $70,000 bonds to build central southwest storm sewer. W. E. Sarver, city engr.

O., Cincinnati—City to sell $920,000 bonds to build Millcreek trunk sewer. F. Krug, city engr.

O., Cleveland—City plans to install sewers Woodhill Rd. and Tate Ave. R. Hoffman, city engr.

O., Lima—City to sell $855,000 bonds to construct intercepting sewers and sewage treatment plant. C. Bryan, city engr.

O., Youngstown—City plans sewers, Mill Creek and Southern Dist. About $1,000,000. F. M. Little, engr.

Ind., South Bend—City rejected bids Chestnut St. sewer. New bids soon.

Mich., Detroit—City plans to build sewerage system, block or brick. About $16,000,000. R. H. McCormick, city engr.

Ill., Oregon—City voted $200,000 bonds to build sewers and improve 4th St.

Wis., Burlington—City sold $13,000 bonds to construct sewers in Perkins Park and in east side of Fox River.

Wis., Campbellsport—See "Water-Works."

Minn., Dodge Center—City soon lets contract sewerage system. About $32,000. J. F. Druar, 312 Commercial Bldg., St. Paul, engr. Noted July 5.

Kan., Hutchison—Council passed ordinance creating Grand View Industrial Sewer Dist. G. L. McLane, city engr.

S. D., Mobridge—City sold $40,000 bonds to build sewers. Noted June 14.

Mo., St. Joseph—Bd. Pub. Wks. soon lets contract building sewer, Dist. No. 16. C. P. Hoff, city engr.

Tex., Austin—City election soon to vote on $315,000 bond issue to build sewage disposal plant and install fire alarm system. A. T. Dickey, city engr.

Okla., Sentinel—City election Aug. 18, to vote on $10,000 bond issue to build sewerage system.

Okla., Woodward—City election soon to vote on $42,000 bond issue to improve water-works, sewerage and light systems. F. H. Killburn, city supt.

Okla., Wynnewood—City election soon to vote on bonds to build sewerage system.

Colo., Trinidad—City voted July 23 in favor of issuing $30,000 bonds to build purification plant and extend sewer system. L. R. Douglas, city engr.

Cal., East San Diego—City plans to install sewerage system. Address Sanitary Engr., State Bd. Health, Sacramento.

Cal., Glendale—F. P. Newton Co., having plans prepared by Quinton, Code & Hill, engrs., Hollingsworth Bldg., Los Angeles, sewerage system, Selvas de Verdugo, a tract north of here.

N. S., Halifax—City plans sewer extensions. About $12,000. F. W. W. Doane, city engr.

BIDS DESIRED

Conn., New Haven — (Official) — Until Aug. 20, by F. L. Ford, city engr. building sewers and appurtenances, portions Hillside Pl., Eddy and Ivy Sts.

N. J., Camden—Until Aug. 20, by Highway Dept., building sewer, Copewood St. L. E. Farnham, city engr.

Pa., Sharon—(Official)—Until Aug. 21, by C. B. Lartz, boro. secy., building sewers and appurtenances, including about 8053 ft. of from 8- to 24-in. vitr. pipe or rein.con. pipe sewer, 34 manholes, 1170 cu.yd. rock excavation. G. Nicholls, boro. engr.

Tenn., Kingsport—See "Streets and Roads."

O., Bowling Green—(Official)—Until Aug. 18, by Dir. Pub. Serv., building sanitary sewers from Outlet 81, through Case and Merry Aves. to Thurston Ditch; also lateral sewer from Outlet No. 75 to Case Ave. Noted June 7.

Sewers (Continued)

O., Cleveland—(Official)—Until Aug. 24, by E. Shattuck, comr. purch. and supplies, constructing Sects. Nos. 4 and 5, intercepting sewer. R. Hoffinger, city engr.

O., Columbus—Until Aug. 21, by A. Borden, dir. pub. serv., sewers in various sts. H. Maetzel, city engr.

Ind., Muncie—(Official)—Until Aug. 18, by Bd. Pub. Wks., building 5th St. sewer No. 3 and Elbright sewer No. 1. J. R. Kelly, city clk.

Ill., Chicago—(Official)—Until Aug. 21, by Bd. Local Imprvs. building sewers and drains on various streets. E. J. Glackin, secy. J. Sinnan, city engr.

Ill., Hillsboro—Until Sept. 15, by W. D. P. Warren, city engr., building sewer extensions. About $12,000.

Wis., Beloit—(Official)—Until Aug. 17, by Pub. Wks. Com., building sewers, Sewerage Dist. B, portions Summit and Park Aves., including about 3740 ft. of 8-in. sewer, 14 manholes. G. E. Heebink, city engr.

Ia., Marshalltown—(Official)—Until Aug. 20, by A. A. Rosengren, city clk., building sanitary sewers in portions North 7th Ave., Fremont, Jerome, West Main, West Nevada, South 12th, South 7th, Turner, and May Sts.; also South 7th and South 9th Aves. W. H. Steiner, city engr.

Ia., Seymour—(Official)—Until Aug. 21, by J. W. Lowrey, city clk., building 2200 ft. of from 6- to 12-in. sewers and 2 disposal plants. M. G. Hall, Centerville, engr. Noted June 7.

Minn., Mora—(Official)—Until Aug. 30, by Ogilvie Village, Kannabeck Co., building sanitary sewerage and water-works systems, including sewage disposal plant and outfall sewers, etc. J. F. Druar, 312-316 Commercial Bldg., St. Paul, engr.

Minn., St. Paul—(Official)—Until Aug. 27, by H. W. Austin, purch. agt., building Jefferson-Cretin Sewer Dist. No. 2. O. Claussen, city engr.

Utah, Salt Lake City—(Official)—Until Aug. 21 (change of date) by G. Snow, city recorder, constructing pipe sewers, Sewer Extension No. 374, portions 3rd and 4th Aves. Noted Aug. 9.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn—L. H. Pounds, boro. pres. let contract building sewers in portions Vermont Ave., Crosby Ave., Bulwer Pl., Miller Ave., and Highland Blvd., to Kenmore Contg. Co., 6102 18th Ave. About $14,090.

N. J., Newark—Bd. Freeholders, Essex Co., received low bid, sewage disposal plant, Overbrook Hospital, from Sanitary Sewerage Treatment Co., Newark, $52,500.

★Pa., Midland—See "Streets and Roads."

★Md., Hagerstown—City Sewerage Comn. let contract, 4 mi. main sewers, and 3 mi. house connections, to H. C. Brooks Constr. Co., Martinsburg, W. Va., $111,777. Noted July 12.

★Va., Abington City—(Official)—City let contract constructing sanitary sewarage system to I. C. Mishler, 105 Spruce St., Chattanooga, Tenn., $24,600. Noted Aug. 9.

★O., Cleveland—Bd. Control let contract, outfall service, from East 140th to Lake, to American Constr. Co., 1552 Rockefeller Bldg., $360,000.

★Ind., South Bend—City let contract building sewer, Dunn and Howard Sts. to Staples & Ackerman, South Bend.

★Cal., Folsom—Dirs. Folsom Sanitary Dist. let contract, sewerage system and sewage disposal tank to Heafey & Tobin, Oakland, $20,948.

BRIDGES

Proposed Work

N. J., Mays Landing—Bd. Freeholders, Atlantic and Burlington Cos. preparing plans for 1100-ft. rein.-con. bridge, 15 ft. wide.

N. J., Mays Landing—State Highway Comn., Trenton, preparing plans 100-ft. rein.-con. bridge, Mays Landing Rd., 35 ft. wide.

Pa., New Castle—Lawrence Co. and Mahoning & Shenango Ry. plans bridge over Neshahannock Creek. About $66,000. R. T. Sullivan, Youngstown, ch. engr. ry.

Pa., Sunbury—Northcumberland and Union Cos. rejected bid for 2000 ft. rein.-con. inter-county bridge over Susquehanna River between Watsontown and White Deer. Noted July 12.

Va., Sulphur Mine—Mineral Belt R.R. plans to build rein.-con. bridge and trestle. B. Williams, pres.

W. Va., Point Pleasant—Baltimore & Ohio R.R. prepared plans for bridge over Great Kanawha River. H. A. Lane, Baltimore, ch. engr.

N. C., Asheville—City and Buncombe County plans 100-ft. bridge over French Broad River, 30 ft. wide, rein.-con. arches and girders. About $110,000.

Fla., Palmetto—City voted $15,000 bonds to build bridges. W. E. Mann, clk.

O., Columbus—Franklin Co. Comrs. sold $176,000 and $168,000 bonds to build rein.-con. bridges over Olentangy River at 3rd and Lane Aves., Clinton and Franklin Twps. J. Scott, clk. Noted July 19.

O., Lima—City sold $100,000 bonds to build bridges over Ottawa River. D. L. Rupert, aud. Noted June 7.

O., Miami—Troy Co. soon lets contract for rein.-con. bridge over Sweetwater River at Covington. About $18,000. L. P. Knoop, Troy, co. engr.

Ill., Kankakee—Illinois Central R.R. plans to build 4-track rein.-con. bridge over Kankakee River. A. S. Baldwin, Chicago, ch. engr.

Minn., Rochester—City soon receives bids for 50-ft. rein.-con. girder bridge, 79 ft. long, 20 ft. roadway, 33 ft. wood block floors. J. C. Utton, city engr.

N. D., Grand Forks—Grand Forks Co. Comrs. plan to build bridge over Red Lake River.

Mont., Great Falls—Cascade Co. plans election to vote on bonds to build 2 bridges, 1 to connect city proper with Little Chicago.

Mo., Palmyra—Marion Co. Comrs. plans to build 136-ft. bridge over Fabius River at Taylor.

Ark., Texarkana—Comrs. Red River Bridge Dist., Miller Co., plans 1200-ft. steel highway bridge, concrete floors. About $250,000. Harrington, Howard & Ash, Orear-Leslie Bldg., Kansas City, Mo., engrs.

Tex., Palestine—Texas State R.R. plans to build 13 bridges. J. B. Welborn, mgr.

★Okla., Guthrie—Logan Co. receiving bids about Sept. 1 building 15 bridges. About $25,000. A. A. Leer, clk. Peckham & Wilkins, 606 Majestic Bldg., Oklahoma City, engrs.

Okla., Oklahoma—Oklahoma Co. having plans prepared by H. C. Adams, engr., for 300 rein.-con. bridges and culverts, 10-, 40- and 80-ft. spans. About $383,000.

Okla., Poteau—See "Streets and Roads."

Okla., Wetumka—(Official)—Town sold $34,000 bonds to build bridges and roads. Noted Aug. 2.

Ore., Beaver—C. H. Purcell, state bridge engr., prepared plans 120-ft., rein.-con. viaduct over Beaver Creek, Tillamook Co.

Ore., Jacksonville—Jackson Co. soon receives bids building 126-ft. Howe truss bridge over Big Applegate Creek.

Ontario—See "Railways."

Ont., Galt—Canadian Pacific Ry. prepared plans for rein-con. bridge. About $20,000. J. M. Fairbairn, Montreal asst. ch. engr.

BIDS DESIRED

N. Y., Hampton—(Official)—Until Aug. 17 by E. S. Douglass, supt. highways, building rein.-con. arch bridge over Poultney River at Leonards; advertised in this issue.

N. J., Somerville—Until Aug. 17, by J. Dougherty, Somerset Co. engr., building rein.-con. arch bridge on Chimney Rd. Noted July 12.

Pa., Williamsport—(Official)—Until Sept. 4, by Bd. Comrs. Lycoming Co., building rein.-con. bridge over Susquehanna River at Duboistown; advertised in this issue.

Md., Rockville—(Official)—Until Aug. 28, by Montgomery Co. Comrs. building rein.-con. bridge over Big Seneca. J. R. Lewis, pres.: advertised in this issue.

W. Va., New Martinsburg—Until Sept. 1 by S. Meyers, Wetzel Co. clk., building I. D. Morgan bridge over Buck Run, Grant Dist., 32-ft. span, 40-ft. center line roadway; Mobley bridge over North Fork Fishing Creek, 40-ft. span, 14-ft. roadway; Wileyville Bridge over Hartley Run, Center Dist., 40-ft. span, 16-ft. roadway; T. A. Shuman Bridge over Steel Run, Center Dist., 55-ft. span, 16 roadways; B. F. Poe bridge over Raccoon Run, 20-ft. span, 27-ft. center roadway.

Fla., Bradentown—Until Sept. 11, by L. L. Hine, city clk., building bridge over Manatee River, between Bradentown and Palmetto, ¾ mi. long, 22 ft. wide, 18 ft. driveway. C. S. Hill, Palmetto, engr. Noted July 5.

Tenn., Hohenwald—Until Aug. 28 by Lewis Co. Highway Comrs. building 2 steel or rein.-con. bridges over Buffalo River and Swan Creek. E. Gallaher, secy.

Tenn., Kingsport—See "Streets and Roads."

Ohio, Columbus—(Official)—Until Aug. 29, by Bd. Comrs. Franklin Co., building Mound St. bridge over Scioto River, 1049 ft. long, 56 ft. wide, involving 24,000 cu.yd. concrete, 880,000 lb. reinforcing steel, 82,000 cu.yd. excavation. J. Scott, clk.

Ill., Channahon—(Official)—Until Aug. 28, by Dept. Pub. Wks., Springfield, building concrete pier and abutment, etc. L. D. Puterbaugh, dir.; advertised in this issue.

Minn., Mora—See "Excavation and Dredging."

Wash., Spokane—Until Aug. 24 by Spokane Co. Comrs. building steel highway bridge over Spokane River, Harvard Rd., 2 200-ft. steel riveted trusses, 1 concrete pier, 2 wing abutments, filled approaches. A. R. Scott, co. engr.

N. S., Annapolis—Until Sept. 1, by E. H. Armstrong, building steel bridge from Annapolis to Granville Ferry for Dept. Wks. and Mines, Provincial Government.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Dedham—See "Streets and Roads."

Conn., Hartford—Bd. Contract and Supply received low bids (a) rein.-con. bridge over Park River, Prospect St., (b) bridge with retaining wall from F. D. Miller, Norwich, (a) $18,605 (b) $27,910; C. H. Slocomb, 5 Victoria Rd., (a) $20,107, (b) $30,233; Acme Eng. Co., 868 Main St., (a) $24,522 (b) $37,037.

★N. J., Plainfield—Bd. Freeholders, Union Co. let contract 50-span rein.-con. bridge, Norwood Ave. to F. W. Schwiers, Jr. Co., 90 West St., New York City.

★Pa., Hamilton—Philadelphia & Reading R.R. let contract steel bridge, New York Branch, to Amer. Bridge Co., Widener Bldg., Phila.

★Pa., Hokendauqua—City let contract repairing bridge over Lehigh River to Allentown Constr. Co., 11 North 11th St., Allentown, $89,300.

★W. Va., Fairmont—(Official)—City let contract South Side Bridge over Coal Run to J. F. Casey Co., Union Arcade, Pittsburgh.

★Ga., Calhoun—Bd. Comrs. Gordon Co. let contract 250-ft. steel drawbridge over Oostanaula River, to Austin Bros., 156 Greenwood Ave., Atlanta.

★Ga., Dalton—Bd. Co. Comrs. Whitfield and Murray Cos., let contract 144-ft. rein.-con. bridge over Conasauga River at Jones Ford to Champion Bridge Co., $10,450. Noted June 7.

★O., Dayton—Montgomery Co. let contract steel superstructure for bridge over Great Miami River to Brookville Bridge Co., Brookville, $114,700.

★O., Norwalk—Huron Co. let contract building bridges to E. K. Jennings, Fitchburg; McDonald & Woods, Norwalk, and A. Hayes, Wakemaw.

★Mich., Carrolton—Pennsylvania Detroit R.R. let contract bridge over Huron River near Carrolton to Illif Co., London, O.

★Mich., Crystal Falls—State Highway Comn. and Iron Co. let contract rein.-con. bridge at Iron River to J. W. Hoose, Iron Mountain and B. W. Hicks, Vulcan, $25,000.

★Ill., Elgin—City let contract building rein.-con. bridge over Fox River, Kimball St. to T. J. McCarthy, 220½ Main St., Davenport, $59,000.

★Ia., Denison—Crawford Co. let contract building bridges to Deloit Bridge Co., Deloit, $19,400; Des Moines Bridge & Iron Co., Des Moines, $19,690; O. H. Knief, $6500; T. A. Hickey, Vail, $8415; Lana Constr. Co., Council Bluffs, $5854.

★Ia., Mason—City let contract 2-span bridge over Willow Creek to Henkel & Brown, Mason City, $17,500.

★Minn., Sleepy Eye—Brown Co. let contract building 7 bridges over Judicial ditches Nos. 17 and 18 to Joliet Bridge & Constr. Co., 731 Metropolitan Life Bldg., Minneapolis, $16,890.

★Neb., Geneva—Fillmore Co. let contract for 2 40-ft. rein.-con. arch bridges to F. N. Graben, Exeter and J. W. Keupf & Son, Shickley. Noted June 28.

Mo., Independence—Jackson Co. received low bids building rein.-con. approaches to Athol Bridge from Halpin & Boyle, Kansas City, $14,780; J. W. Phillips, $16,257; J. A. Sheedy $17,787.

★Ark., Little Rock—City let contract repairing bridge to Missouri Valley Bridge & Iron Co., Leavensworth, Kan., $40,000.

Bridges (Continued)

★Okla. Eufaula—Jefferson Highway Bridge Co. let contract bridge over Canadian River to Midland Bridge Co., 504 Railway Exchange Bldg., Kansas City, Mo., $143,610. Noted July 19.

★Colo., Denver—Denver Co. let contract building 10 rein.-con. bridges to Colorado Bridge & Constr. Co., Denver, $28,965.

★Wash., Kalama—Cowlitz Co. let contract building bridge over Kalama River to R. C. Nieth, Portland.

★Ore., Salem—Marion Co. let contract steel bridge over Williamette River to Coast Bridge Co., Railway Exchange Bldg., and R. Wakefield, $237,401. Noted June 28.

★Cal., Nicolaus—Sutter Co. Supervs., Yuba City, let contract building bridge over Feather River to W. C. Duncan Constr. Co., Sharon Bldg., San Francisco, $118,516. Noted Aug. 2.

★Cal., San Diego—San Diego Co. let contract rein.-con. bridge over Sweetwater River to Holland Constr. Co., San Diego, $10,869.

★Que., Montreal—City let contract steel for bridge and appurtenances to Steel Co. of Canada, 1272 Notre Dame St., $78,887.

★Que., Montreal—City let contract building bridge, Church Ave., to Deaken Constr. Co., Ltd., 37 Mayor St., $78,887.

★Que., St. Tite—Village let contract steel for 4 bridges to Eastern Canada Steel and Iron Works, Ltd., St. Malo, $13,000.

★Ont., Toronto—Canadian Pacific R.R. let contract rein.-con. bridge to Wells & Gray, Confederation Life Bldg., $150,000.

STRUCTURAL STEEL WORK

Proposed Work

Ark., Texarkana—See "Bridges."
Ore., Jacksonville—See "Bridges."

BIDS DESIRED

Tenn., Hohenwald—See "Bridges."
Wash., Spokane—See "Bridges."
N. S., Annapolis—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Hamilton—See "Bridges."
★Ga., Calhoun—See "Bridges."
★O., Dayton—See "Bridges."
★Mich., Detroit—See "Industrials."
★Tex., Dallas—See "Buildings."
Ore., Salem—See "Bridges."
★Que., Montreal—See "Bridges."
★Que., Montreal South—See "Water-Works."

REINFORCED CONCRETE

Proposed Work

N. J., Mays Landing—See "Bridges."
Va., Sulphur Mine—See "Bridges."
N. C., Asheville—See "Bridges."
Ga., Atlanta—See "Water-Works."
La., New Orleans—See "Industrials."
O., Columbus—See "Bridges."
O., Miami—See "Bridges."
Ill., Kankakee—See "Bridges."
Minn., Rochester—See "Bridges."
Okla., Altus—See "Miscellaneous."
Okla., Oklahoma—See "Bridges."
Ont., Galt—See "Bridges."

Bids Desired

N. Y., Hampton—See "Bridges."
N. J., Somerville—See "Bridges."
Pa., Williamsport—See "Bridges."
Md., Rockville—See "Bridges."
Tenn., Hohenwald—See "Bridges."
O., Columbus—See "Bridges."
O., Lebanon—See "Miscellaneous."
Ill., Channahon—See "Bridges."
Minn., Mora—See "Excavation and Dredging."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Conn., Hartford—See "Bridges."
★N. J., Plainfield—See "Bridges."
★Ga., Dalton—See "Bridges."
★Mich., Crystall Falls—See "Bridges."
★Mich., Detroit—See "Buildings."
★Mich., Detroit—See "Industrials."
★Ill., Elgin—See Bridges."
★Neb., Geneva—See "Bridges."
Mo., Independence—See "Bridges."
★Colo., Denver—See "Bridges."
★Cal., San Diego—See "Bridges."
★Ont., Toronto—See "Bridges."

STREETS AND ROADS

Proposed Work

Mass., Everett—(Official)—City voted Aug. 9 following street improvements: $50,000 to build streets, $65,000 for paving, $1500 to build sidewalks.

N. Y., Buffalo—City Council plans paving Soldiers Pl. About $13,500. G. H. Norton, city engr.

N. Y., Troy—(Official)—Rensselaer Co. to sell Aug. 21 $75,000 bonds to build roads. D. Runkle, co. treas.

N. J., Freehold—Bd. Freeholders, Monmouth Co., plans paving Church St. and Carr Ave., concrete, Keansburg.

N. J., Newton—Sparta Twp. Comn. plans building Sparta-Woodport Rd., Sussex Co. About $20,000. A. H. Konkle, engr.

N. J., Palmyra—Township Comn. plans paving Broad St., concrete.

N. J., Paterson—Bd. Freeholders Passaic Co. plans to improve 13 roads in Passaic, asphalt bituminous macadam. G. W. Botby, clk.

N. J., Paterson—Bd. Pub. Wks. plans improving Water, Fulton and Arch Sts., concrete, asphalt and granite block. H. J. Harder, city engr.

N. J., Somerville—(Official)—Somerset Co. Bd. Freeholders plans to improve road from Gladstone to Pottersville. About $10,000.

N. J., Trenton—City plans to widen East Hanover, North Montgomery and Chauncey Sts. in center of city. A. Swan, Jr., city engr.

Pennsylvania—(Official)—State Highway Comn., Harrisburg, received no bids paving Alleganey and Washington Cos. Noted July 19.

Del., Georgetown—County Comrs. plans $1,000,000 bond issue to build new roads, slag macadam, Sussex Co. Noted May 24.

Md., Annapolis—Anne Arundel Co. Comrs. soon lets contract concrete roadway, 20 ft., Church St., from Blvd. to Pennington Ave., connecting Brooklyn and Curtis Bay. About $20,000. E. T. Hayman, co. engr.

Va., Bristol—City to sell $20,000 bonds to build street improvements.

Va., Williamsburg—City plans to pave streets. About $15,000.

W. Va., Charleston—City soon lets contract paving portions Washington, Glen, Monongalia, Gardner, Watts, Spring and Kanawha Sts., and Delaware, Ruffner and Columbia Aves. M. J. McChesney, city engr.

W. Va., Charleston—City election Sept. 25, to vote on $400,000 bond issue to pave streets.

W. Va., Wayne—Wayne Co. election soon to vote on $1,000,000 bond issue to build roads.

W. Va., Wheeling—City plans $54,000 bond issue, improving streets. Address D. G. Brown, city clk.

N. C., Charlotte—City soon lets contract building 5 mi. roads between Camp Greene and city.

N. C., Hendersonville—City plans $180,000 bond issue, paving streets, asphalt.

N. C., Morgantown—Burke Co. Comrs. sold $50,000 bonds to build roads. Noted May 31.

S. C., Abbeville—County election, Aug. 7, defeated $300,000 bond issue to build roads. Noted May 17.

S. C., Pickens—Pickens Co. voted $250,000 bonds to build roads. C. L. Cureton, chn. highway comn.

Fla., Miami—Dade Co. plans election to vote on $140,000 bond issue improving roads and bridges. E. D. V. Burr, chn. bd. co. comrs.

Miss., Biloxi—City election soon to vote on $40,000 bond issue to resurface 6½ mi. streets.

La., Monroe—City election soon to vote on $200,000 bond isue to build roads. Address, Mayor.

Ky., Danville—City Council plans paving Wilderness Rd.

O., Batavia—Claremont Co. to sell $21,350 bonds Aug. 27 to improve roads. C. Searles, aud.

O., Cleveland—City plans to pave portions Lawn, East 103rd, East 74th, Pow, Joan and Bernard Sts. R. Hoffman, city engr.

O., Cleveland—City rejected bids paving Fairchild, Wilbur and East 167th St.

O., Dayton—City sold $186,500 bonds for paving Jefferson St., East 3rd St., Grafton, Manhattan, Oxford and Wroe Aves., Harvard Blvd. and Klee Court.

O., Xenia—City election soon to vote $17,000 bond issue to pave streets. J. P. Shumaker, city engr.

Indiana—(Official)—Co. Comrs. received no bids building roads as follows:

Indianapolis; gravel Rd., Warren Twp. L. K. Kesler, aud.

Brazil; stone and gravel road on line between Posey and Perry Twps. W. O. Graesser, aud Noted July 26.

Ind., Terre Haute—Vigo Co. sold $13,500 bonds to regravel Bolton Rd., Fayette Twp.

Ind., Warsaw—(Official)—Kosciusco Co to sell, Aug. 20, $45,668 bonds to build roads. A. J. Logan, treas.

Mich., Harrison—Lake Twp., Clare Co. election Aug. 20, to vote on $50,000 bond issue to improve roads.

Mich., St. Joseph—Berrien Co. soon receives bids paving several roads. Address Co. Clk.

Ill., Murphysboro—Jackson Co. plans to build 200 miles rock roads with state aid. About $680,000.

Ill., Oregon—See "Sewers."

Ill., Pekin—Tazewell Co. soon receives bids building 2 sect. state aid roads. About $10,761 and $6697 respectively. F. S. Cook, Mackinaw, supt. highways.

Wis., Fond Du Lac—(Official)—City rejected bids paving, grading portion Oshkosh Rd. Noted July 26.

Wis., West Allis—City plans to pave portions 68th, 55th, 56th, 57th and Greenfiels Aves. E. G. Orlurt, city engr.

Ia., Des Moines—City plans to pave new route to Camp Dodge, Douglas Ave., 5th St., 1½ mi. About $66,000. J. Budd, supt. sts. K. Kastberg, city engr.

Ia., Waterloo—Blackhawk Co. Comrs. plans to extend 17 mi. roads, including 12 mi. between Voorhies and La Porte City, and portion Lincoln St., Cedar Falls connecting Cedar City and Cedar Falls.

Neb., Havelock—City voted $10,000 bonds to pave streets. A. Dobson, city engr.

Neb., Omaha—Douglas Co. Comrs. plans to repair road, 30 mi., macadam.

Mont., Butte—City soon lets contract following street work: Repaving Dist. No. 243, vitr. brick or creosoted wood block. About $21,901; relaying granite block paving and resurfacing bitulithic or asphaltic concrete, Dist. No. 245. About $8304; Dist. No. 244, repaving vitr. brick or creosoted wood block. About $16,176. J. J. Armstrong, city engr.

Missouri—State Highway Comn. Jefferson City having plans prepared building hard surfaced road, Montgomery Co., Trails Highway; also road, Mineola Hills.

Mo., New Madrid—New Madrid Co. voted $850,000 bonds to build roads. Noted Aug. 2.

Ark., Forrest City—St. Francis Co. Rd. Improv. Dist. No. 3, plans to improve roads. About $195,000.

Ark., Harrisburg—Poinsett Co. Comrs. plans to build 9 mi. highways, macadam. About $68,000.

Ark., Jonesboro—Craighead Co. Comrs. plans to build highway, 23 mi., macadam. About $148,000.

Ark., Perryville—Perry Co. Road Dist. No. 1 plans to build 35 mi. road; main highway part, Mammoth Spring to Hot Springs route. About $87,500. D. M. Wallace, pres.

Ark., Rison—Cleveland Co. Comrs. plans to build roads in Dist. No. 1 from Jefferson Co. line south to Kingsland and Rison, 22 mi. gravel. About $126,000.

Tex., Cameron—State Atty. General's Dept. sold $20,000 bonds to build roads in Milam Co. Rd. Dist. No. 7 and $15,000 bonds, same purpose, Rd. Dist. No. 12. Noted Aug. 2.

Tex., Cold Springs—San Jacinto Co. voted $75,000 bonds to build roads, Rd. Dist. No. 4. Noted July 19.

Tex., Crockett—Houston Co. plans election Aug. 21 to vote on $100,000 bond issue improving roads.

Tex., Dallas—City plans to pave Gaston Ave. About $50,000. H. Moseley, city engr.

Tex., El Paso—City had plans prepared paving portions Bassett Ave. About $39,503. G. Eppy, city engr.

Streets and Roads (Continued)

Tex., Pittsburgh—(Official)—Camp Co. Leesburg and Newsome precincts, Road Dist. No. 2, voted, Aug. 6, on $35,000 bond issue, improving highways. M. L. Minter, co. engr. Noted July 26.

Okla., Atoka—Atoka Co. election Aug. 2, to vote on $30,000 bond issue to build roads and bridges. G. Marlow, clk.

Okla., Bartlesville—City plans paving and resurfacing several streets. J. McMullen, supt. streets.

Okla., Clinton—City soon lets contract, paving 30,000 yd. Dist. No. 3. About $85,000. R. Bennett, city clk. Benham Engr. Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Guthrie—Logan Co. having plans prepared by Peckham & Wilkins, Engrs., 606 Majestic Bldg., Oklahoma, for 2 mi. hard surface road and 28 mi. dirt road. About $50,000. A. A. Leer, clk.

Okla., Oklahoma City—Oklahoma County plans building 100-mi. road. About $100,000. T. Bodine, city clk.

Okla., Poteau—LeFlore Co., voted $20,000 bond issue for building roads and bridges, Page Twp.

Okla., Wetumka—See "Bridges."

Idaho—State Highway Comn., Boisé, soon lets contract building road between New Meadows and Grangeville. About $1,000,000. Address State Highway Engr., Booth.

Idaho, Cottonwood — Cottonwood Highway Dist. voted $50,000 bonds to build roads.

Idaho, Ferdinand—Idaho Co., Ferdinand Highway Dist. voted $25,000 bonds to build highways.

Idaho, Rexburg — City plans to pave, grade, and drain Main, 3rd and other streets. About $93,000. H. M. Sundberg, city engr.

Wash., Bellingham—City plans to pave portions Cherry St., asphalt, concrete or some other hardsurfacing material. About $18,000. C. Lindberg, city engr.

Wash., Mt. Vernon—Skagit Co. Comrs. having plans prepared, paving Cook Rd., 4.1 mi. 16 ft., one course concrete, from Sedro Wooley. About $78,850. W. E. Costello, co. engr.

Wash., North Yakima—Co. Comrs. plan to complete 24 mi. McClellan Pass Highway. About $100,000. Address G. F. Catterill, state highway engr., Olympia. Noted Apr. 26.

Wash., Okanogan—Council passed ordinance, paving P and other streets. About $10,000.

Wash., Seattle—King Co. Comrs. having plans prepared paving road from Enumclaw toward Seattle, 2 mi., concrete. About $30,000; also Hollywood Farm to Redmond, 1 mi. concrete. About $16,000. S. J. Humes, co. engr.

Wash., Seattle—City had plans prepared paving and grading 17th Ave., S. About $114,000. A. H. Dimock, city engr.

Wash., Spokane—Spokane Co. Comrs. granted permission paving Mullinix Rd., Cheney Twp.; 15 mi. About $75,000.

Oregon—State Highway Com., Salem, soon lets contract Bend-La Pine highway. About $17,000.

Ore., Coquille—Coos Co. Court soon receives bids macadamizing road between Empire and South Inlet bridge. About $12,000.

Ore., Myrtle—City soon lets contract paving portions 1st St. About $15,000.

Ore., Roseburg—Douglas Co. Court plans improving Pacific Highway between Roseburg and Lane Cos., with state aid. About $200,000.

Cal., Modesto—City defeated $40,000 bond issue to pave streets. Noted July 5.

Cal., Riverside—County Supvrs. plan $34,000 appropriation, building highways, either Coachella Valley or Corona Elsinore road projects.

Cal., Sacramento—City sold $3,000,000 California state highway bonds to Natl. City Co. of California.

Ont., Ottawa—Comrs. of Wks. plans paving several streets. About $13,000.

Ont., Sandwich, West Twp.—Twp. Council plans paving Bridge Ave. About $19,950. E. Bondy, twp. clk.

Ont., Toronto—City plans to pave Dundas St. from Ossington Ave. to Lansdowne Ave., asphalt. About $70,000.

BIDS DESIRED

Massachusetts—(Official)—Until Aug. 21, by State Highway Comn., Boston, paving in following towns: Randolph, Malden, Melrose and Saugus, 6100-ft. Fitchburg, 13,400-ft., Egremont-Sheffield, 13,900-ft. W. D. Sohier, member.

Mass., Dorchester—Until Aug. 20, by Dept. Pub. Wks. paving Dorchester Ave., granite block.

Connecticut—(Official)—Until Aug. 20, by C. J. Bennett, state highway comr., Hartford, for following road improvement: Waterford Twp., Niantic Rd., 3500 lin.ft., grading. A. W. Bushell, Thayer Bldg., Norwich, div. engr. Stratford Twp., Barnum Ave., Hassam or rein.-con. 7300 lin.ft. Cheshire Twp., South Main St., concrete, 16,273 lin.ft. Camden Twp., Whitney Ave., 1633 lin.ft., concrete. E. C. Welden, Chamber Commerce Bldg., New Haven, div. engr.

N. Y., New York—Until Aug. 20, by W. Williams, comr. Water Supply, Gas and Electricity, Municipal Bldg., building filter beds, removing and placing sand on existing filter beds at Mt. Kisco sewage disposal plant.

N. J., Cape May—Until Aug. 21 by Co. Comrs., building stone road through Stone Harbor. L. M. Rice, Wildwood, co. engr.

N. J., Elizabeth—Until Aug. 27, by Bd. Freeholders, Union Co., paving Morris Ave., Summit, 3675 sq.ft., 22 in. wide, bituminous concrete surface pavement on cement, concrete base, Westfield Ave., Rahway, vitr. brick on cement mortar bed and improving Mountain Ave., east sect., Mountainside, Westfield P. O., bituminous concrete on concrete foundation, 25,901 sq.yd. paving. J. L. Bauer, co. engr.

N. J., Little Falls—Until Aug. 27, by Twp. Comn., building pumping station, repairing amiesite pavement, Main St. and Paterson Ave., and grading sidewalks Main St. and Fairfield Rd.

N. J., New Brunswick—Until Aug. 27, by Bd. Freholders, Middlesex Co., repairing and reconstructing Rahway Ave., Roosevelt Sect. 2, warrenite surface on rebuilt macadam base and 21,930 yd. paving. A. Atkinson, city engr.

N. J., New Brunswick—Until Aug. 30, by Boro. Council, Middlesex Co., repairing Riva Ave., Milltown, concrete gutters, macadam with Tarvia X top dressing. C. Bauries, acting mayor.

N. J., New Brunswick—Until Sept. 4, by Bd. Comrs. paving Remsen Ave. and Comstock, Brown, Townsend and Condict Sts. A. Atkinson, city engr. Noted July 26.

Pa., Pittsburgh—(Official)—Until Sept. 4 by Co. Comrs., grading and paving 15 roads in various twps., involving about 96,555 ft. grading. J. P. Moore, co. controller.

Md., Baltimore—Until Aug. 22, by City, grading, curbing and paving portion Weldon Ave., including 2000 sq.yd. sheet asphalt, 1600 lin.ft. armored concrete curb, 250 sq.yd. vtr. brick. J. H. Robinette, pres. R. M. Cooksey, city engr.

Va., Farmville—Until Aug. 28, by City, paving several streets, concrete or asphalt block paving. W. M. Piatt, Durham, N. C., engr.

Ala., Scottsboro—Until Sept. 1, by Jackson Co. Comrs. macadamizing part State Trunk Rd. No. 4, between Woodville and Limrock. About $10,000. W. S. Keller, state highway engr.

Louisiana—Until Aug. 20, by State Highway Comrs. building East Baton Rouge Parish, 2.6 mi. Lincoln, 14.32 mi. D. Buie, state highway engr.

Louisiana — (Official) — Until Sept. 4 (change of date) by Highway Dept. Bd. State Engrs., Court Bldg., New Orleans, building 33-mi. road, Rd. Dist. No. 1, Coupee Parish, gravel. F. M. Kerr, ch. engr. Noted Aug. 2.

La., Amite—Until Aug. 22, by Bd. Supervs. Road Dist. No. 4, Tangipahoa Parish, grading, bridging and graveling 3.3 mi. Kentwood Rd., east and west, grading and bridging 4.36 mi. and graveling 3.86 mi., Tangipahoa Rd., east and west. Noted July 19.

Tenn., Kingsport—Until Aug. 30, by W. R. Pouder, city mgr., paving, building sidewalks, and curbs, laying sewer drains, building rein.-con. bridges, including 49,896-sq.yd. paving, asphalt, wood block, or concrete, 21,808-lin. ft. curb and gutter, 16,858 lin.ft. sidewalks.

O., Columbus—(Official)—Until Sept. 4, by Bd. Trustees Ohio State University, macadam roadway, 4560 sq.yd. C. B. Steeb, secy.

O., Lancaster—(Official)—Until Aug. 24, by City, paving portion West Wheeling St., including 10,660 sq.yd., brick, 4900 ft. curbing, 560 ft. backing, 610 lin.ft. steel foundation, concrete curbing, etc. About $22,500. J. Griggs, city engr. Noted May 10.

O., Oxford—(Official)—Until Aug. 22, by D. P. Beaton, village clk., paving High St., 4500 sq.yd. surface, 5100 lin.ft. concrete curb and gutter. L. A. Boulay, 1248-51 Nicholas Bldg., Toledo, engrs.

Indiana—By Co. Comrs. building roads, as follows: Aug. 20: Vigo Co., Terre Haute, gravel road, Nevins Twp.; T. Ferguson, aud. Aug. 25: Marion Co., Indianapolis, improving road, Warren Twp.; L. K. Fesler, aud. Bartholomew Co., Columbus, gravel roads, German and Flatrock Twps. W. H. Scott, aud. Aug. 27: Vanderburgh Co., Evansville, building and improving road, Armstrong Twp.; C. P. Beard, aud. Aug. 30: Madison Co., Anderson, bituminous concrete road, Anderson Twp.; E. T. Flahavin, aud.

Mich., Escanaba—Until Aug. 24, by C. E. Anderson, town clk., paving portions Stephenson Ave., 15,970 sq.yd. bitulithic. W. J. Hodson, city engr. Noted July 26.

Mich., Muskegon—Until Aug. 20, by Gasnovia Twp. Bd., grading and graveling 15 miles roads.

Ill., Danville—(Official)—Until Aug. 20, by Highway Comn., Carroll Twp., Vermillion Co., paving 13,000 sq.yd. concrete or asphalt; also 5547-sq.yd. plain macadam, 3450 sq.yd. reinforcing metal for Indianola. S. K. Van Fleet, town clk., Indianola.

Wis., Beloit—Until Aug. 22, by W. T. Ball, Bd. Pub. Wks., grading and macadamizing 11th St. G. E. Heebink, city engr.

Ia., Burlington—(Official)—Until Aug. 23, by E. P. Weinstein, city clk., paving Bluff Rd., 1 mi. 2-course concrete; portion Main St., brick, 6-in. concrete foundation. C. E. Waterhouse, city engr.

Ia., Jefferson—Until Aug. 20, by Greene Co. Aud., grading Sect. 14; Dana grand junction, Sects. 84, 85 and 86, Jefferson Bagley Rd.

Minn., St. Paul—(Official)—Until Aug. 27, by H. W. Austin, city purch agt., grading portions Bison, Jefferson and Greenwood Aves., Fulham and Sue Sts.; also graveling portions Tatum Ave., paving Minnesota Ave., creosoted wood block. O. Claussen, city engr.

Wyo., Sheridan—Until Aug. 20, by T. A. Morris, city clk., improvements in paving Dist. No. 7, including portion Loucks and Works Sts., 2-in. standard bitulithic or gravel bitulithic, on present foundation. About $53,621. A. Tschirgi, city engr.

Utah, Salt Lake City—Until Aug. 21, instead of 14, by City Recorder, paving Virginia and Alta Sts. and 3rd and 4th Aves., also grading curb, gutter and pavement of Pavement Extension No. 137. Noted Aug. 2.

California—(Official)—Until Aug. 27, by State Highway Comn., Sacramento, paving roads in Contra Costa Co., between Hercules and Eckley, 5.7 mi., portland cement, involving 17,000 cu.yd. excavation, 5680 cu.yd. Class A, portland cement, 1350 cu.yd. Class C, between Eckley and Martinez, 7 mi. same material; Los Angeles Co., between Castaic School and Kay Ranch, 3.8 mi., portland cement, involving 8500 cu.yd. excavation, 4800 cu.yd. Class A portland cement. N. D. Darlington, member.

Cal., Los Angeles—Until Aug. 27, by Bd. Pub. Wks., furnishing asphaltic cement for 1 year. H. B. Ferris, secy.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Dedham — Town let contract building highway and 2 bridges, Bussey St., to Clark & Gore, 11 Montague St., Dorchester, $26,000. Noted Aug. 9.

★N. Y., Buffalo—City let contract paving Mills St., 28 ft. wide, to German Rock Asphalt Co., Morgan Bldg., $21,420.

N. Y., New York—M. M. Marks, boro. pres. received low bid regulating and repaving roadway, Broadway from 137th to 155th Sts., sheet asphalt, concrete foundation from, Dabney Asphalt Co., 52 Vanderbilt Ave., $40,481, Asphalt Constr. Co., 2197 Madison Ave., $40,866, Sicilian Asphalt Paving Co., 41 Park Row, $41,481. Noted Aug. 2.

N. Y., New York—(Official)—Bronx Parkway Comn. received low bids paving portion Bronx River Pkway, (a) asphalt block, (b) bituminous concrete, from Hastings Paving Co., 25 Broad St., (a) $19,833; Union Paving Co., 120 Bway., (b) $20,955. Noted July 26.

★N. J., Flemington—Henderson Co., Bd. Freeholders let contract paving road from West Portal to Bristols Corner 2½ mi. macadam, to W. R. Moore, Far Hills, $12,666. Noted June 28.

★N. J., Harrison—Town Council let contract paving Warren and Ann Sts., to Standard Bitulithic Co., 31 Clinton St., Newark.

★N. J., Kearney—Bd. Pub. Wks. let contract, warrenite paving, Morgan Pl., to Standard Bitulithic Co., 31 Clinton St., Newark. About $20,930.

Streets and Roads (Continued)

★N. J., Mt. Holly—Bd. Freeholders let contract, paving, asphalt, Burlington Co. sect. of Moorestown-Camden Turnpike. About $80,000. Noted July 19.

N. J., Orange—City Comn. received low bids, paving Berkeley Ave., asphalt block on concrete, from Hastings Pavement Co., 25 Broad St., New York City, $32,345, J. J. Geiger, 83 Hartford St., Newark, $36,512, and Ralhp San Giovanni, 128 Warren St., Newark, $37,540.

Pennsylvania—(Official)—State Highway Comn. Harrisburg received low bids building roads in counties as follows: (a) Cambria involving various twps. (1a) East Taylor and Jackson Twps., 11,070 ft., vitr. brick; (1b) East Taylor Twp., 9878 ft. vitr. block; (1c) Jackson Twp., 11,975 ft. vitr. block; (b) Luzerne, (c) Lehigh, (d) Dauphin, (e) Lackawanna, from G. T. Morgan, Johnstown, (1a) $90,053, (1b) $77,541; Shiesley & Janney, Johnstown, (1a) $99,857, (1b) $85,940; Mainwaring & Cummins, Inc., Phila., (1a) $132,986, (1c) $127,934; E. H. Brua, Hollidaysburg, (1b) $84,866; Gibbons & Bentley, Phila., (b) $51,135; O'Brien Bros., 920 North Mam St., Avoca, $51,178; D. M. Rosser, Kingston, $66,249; (c) J. C. Bentley, Elizabeth, N. J., $78,305; (d) F. J. Reilly, Lancaster, $17,888; Stucker Bros. Constr. Co., Harrisburg, $18,692; (e) M. Stipp & Sons, 435 Moir Court, Scranton, $82,027. Noted July 19.

★Pa., Midland—City let contract grading, paving and building sewers to L. B. Markley, Rochester, $67,000.

Pa., Pottsville—City received low bid paving Center St., North and South, from J. B. Trexler, Reading, $4.15 per sq.yd.

Pa., Somerset—Somerset Co. Comrs. received only bid building Brotherton-Berlin Rd. from D. E. Keller, Somerset. Noted July 19.

★Md., Annapolis—Anne Arundel Co. Comrs. let contract resurfacing portion Patapsco Ave. to Anthracite Stone Co., Baltimore, $12,000.

★W. Va., Williamson—(Official)—Mingo Co. let contract, 35 mi. road, earth, involving 26,000 cu.yd. excavation, 2000 cu.yd. masonry and concrete, to Vaughan Constr. Co., Shawsville, Va. Noted July 12.

★S. C., McCormick—(Official)—McCormick Co. Comn. let contract grading and building drainage structures on 70 mi. highway to Ross & Plott, Greensboro, N. C., $121,009. Noted July 12.

★Ala., Gadsden—City let contract paving portion Chestnut St. to Morgan & Co., curbing and guttering to C. O. Duncan. Noted Aug. 2.

★Miss., Friar Point—(Official)—City let contract, building 120,000 sq.ft. concrete sidewalks to Oxford Concrete Co., 901 Mississippi Ave., Greenwood, $11,700. Noted Aug. 2.

★Miss., Yazoo City—Yazoo Co. Comrs. let contract building roads Dist. No. 3 to Healy Constr. Co., Meridian; 2½ mi. beginning Yazoo River Bridge, to Southern Constr. Co., Yazoo. Noted Apr. 26.

★O., Cleveland—Bd. Control let contract improving and paving portions Clark Ave. to Rieley Bros., 348 Arcade, $23,236; Lakeside Ave. to Bentley Bros, Co., 410 Electric Bldg., $15,395.

★O., Columbus—City let contract grading, paving and curbing Portion Livingston St., and Macon Alley to G. Geigele & Son, 52 East Fulton St., $14,213.

★O., Coshocton—(Official)—Ashman, serv. dir., let contract paving 18,000 sq.yd., Sycamore and 3rd Sts., brick, to J. F. Cockran, Coshocton. Noted Aug. 2.

★O., Dayton—City let contract, paving Pitts and Foundry Sts., to Ellsworth Brentlinger. About $12,000 or $15,000. Noted Aug. 2.

★O., Dayton—City let contract, paving East 3rd St. to Finke Eng. Co., Dayton, $2.85 per sq.yd. Gillipsie Ave., wood block, to E. Murray, Dayton, $2.76 per sq.yd.

★O., Findlay—City let contract paving West Lincoln St., Nelsonville Brick, to Paul & Sons, Findlay.

O., Mt. Vernon—City received low bids, paving Wooster Ave., brick, from A. A. Graham, $14,107. Noted Apr. 12.

★O., Toledo—City let contracts paving, Dorr St., 36 ft., creosote wood blocks, to Russell & Jennison Co., $80,500; Superior St., creosote wood blocks, to Peters Bros. Co., $23,440; York St., brick, to M. F. O'Sullivan, $53,347; Chestnut and Paxton Sts. and Homewood Ave., sheet asphalt, to J. Horan, $28,990, $28,425 and $29,214 respectively; Colburn St., rein.-conc., to P. H. Waters, $10,035, and Bishop St., brick, to McKinney Bros., $12,149. Noted July 12.

★Indiana—(Official)—Co. Comrs. let contract building roads as follows:

Rushville; gravel road, Posey Twp., to Lawrence & Ennis, Arlington, $6869. Valparaiso; 2.07- and 2.02-mi. road Center Twp. to G. McGillicuddy, $14,350, and Green & Coplin, $15,900, both of Valparaiso.

Franklin; gravel road, Blue River Twp., to Farr & Porter, Edensburg, $8350.

South Bend; cement road, Penn Twp. to Ruth Constr. Co. Goshen, $32,000.

Cannelton; macadam road, Troy Twp. to C. Panlin Co., Cannelton, $6999.

Wabash; 2 roads, Chester Twp. to Grossnickle Constr. Co., North Manchester, $28,980 and $11,000 respectively.

Columbus; 11,712-ft. gravel road, Flatrock Twp. to D. H. Falout, 2010 West Washington St., Indianapolis, $6990.

Kokomo; stone road, Clay Twp. to F. H. Null, Winfall, $3486.

Renselaer; stone roads. Carpenter and Marion Twps. to M. I. Adams, Rensselaer, $7987.

Rockville; stone and gravel roads, Penn and Adams Twps. to J. Killigan, Bloomingdale, and C. Ireland, Rockville. Noted July 26.

★Ind., Albion—Noble Co. let contract, brick highways, to Northern Constr. Co., Ekhart, and Gripe & Seaman, Goshen. About $177,500.

★Ind., Ft. Wayne—City let contract paving portion Coombs, Garden, Liberty, Osage, Wildwood Sts., and Lake Ave., bituminous concrete, Grace and Kinnard Aves., Lasselle and Webster Sts., sheet asphalt, to Grace Constr. Co., 1702 Winter St.; Wall St., brick, to Moellering Constr. Co., Murray St. Noted Aug. 9.

★Ind., Logansport—Bd. Pub. Wks. let contract improving portion Seybold and Helm Sts., to Palmer & Moore, Logansport, 49c. per cu.ft. curb and gutter, 12c. per sq.ft. sidewalks, 65c. gravel repairs. Noted July 5.

★Ind., South Bend—Bd. Pub. Wks. let contract paving 12,058 sq.yd. aztec asphaltic concrete, to Willeston Constr. Co., P. O. Box 446, $24,050.

★Mich., Bay City—City let contract resurfacing portion Center Ave., asphalt concrete, to Trinidad Paving Co., 3407 Trumball St., Cleveland, $1.10 per sq.yd.

★Illinois—State Highway Comn., Springfield, let contract following road work: Kankakee Co., Kankakee, Sect. H, waterbound macadam to F. L. Shidler, Kankakee, $10,934; Sect. I, concrete, to Goggin Constr. Co., Arcola, $10,469; Ogle Co., Oregon, Sect. D, concrete, to Dronnin & Clark, Box 286, Galesburg, $19,115.

★Ill., Bloomington—City let contract to I. D. Lain, Bloomington, portion Grove St., brick with stone curb. About $30,105.

★Ill., Joliet—City let contract paving and improving various streets and Michigan Pl., brick and bituminous to F. F. Conway Co., Chamber of Commerce Bldg., Chicago, $2.10 per sq.yd.

★Ill., Mattoon—Twp. Comrs. Highways let contract building 2 mi. pavement involving 1900 cu.yd. excava. and 9786.7 sq.yd. monolithic brick paving to James & Thornton.

★Ill., Rockford—City let contract building pavement, 21,112 sq.yd., concrete, macadam shoulders, to Hart & Page, 110 North Court St., $33,016. Noted Aug. 9.

★Wis., Eau Claire—Eau Claire Co. Comrs. let contract, road work, to J. Godder, Fairchild, $50,000.

★Ia., Council Bluffs—City let contract building 3 blocks pavement, concrete, to E. A. Wickham & Co., 19 Scott St., $1.74 per sq.yd. Noted Aug. 2.

Minn., St. Paul—City received low bid paving portion 9th St. and College Ave. from Thornton Bros., Scandinavian-American Bank Bldg., $16,187; Fielding and Shepley, St. Paul, $18,190.

★Kan., Augusta—City let contract paving several streets to C. Bessler Constr. Co., Winfield, $62,882.

★Kan., Hutchinson—City let contract paving portions Crescent Park, 17th, 18th, 19th and 20th Sts., including 24,400 sq.yd. paving, 11,000 cu.yd. excavation to Stamey-Mackey Constr. Co., Hutchinson, $2.19 per sq.yd. vitr. fiber block, asphalt filler on stone mixed concrete base. Noted June 14.

★Mont., Billings—(Official)—City let contract, paving 18,000 sq.yd. gravel bitulithic, to Warren Constr. Co., Billings, $54,147. Noted July 26.

★Mo., Poplar Bluff—(Official)—City let contract 10,394 sq.yd. pavement, 6- and 5-in. bituminous 1811 cu.yd. grading to G. Gleason, Poplar Bluff, $19,000. Noted July 26.

★Mo., Richmond—City let contract, paving, to Kennedy & Olson, 601 Ridge Arcade, Kansas City. About $15,156. Noted July 26.

★Mo., St. Joseph—City let contract paving portions King Hill Ave., sheet asphalt, Garfield, Mitchell Aves. and Mulberry St., asphaltic concrete, to Metropolitan Paving Co., 7th and Olive Sts. Noted July 5.

★Mo., Sedalia—(Official)—City let contract grading, paving, curbing portions Quincy Ave. and Broadway, including 4-in. concrete base, grading, 3-in. vertical fiber brick filler, asphalt, to J. W. Menefee, Sedalia, $2.24½ per sq.yd. curbing, 40c. per lin.ft. Noted Aug. 2.

★Ark., Walnut Ridge—(Official)—City let contract paving Rd. Dist. No. 3, 5.78 mi. macadam, to Gregory Co., Walnut Ridge, $35,000.

★Tex., Coldspring—City let contract building roads Dist. No. 3 to Bland & Smith, Coldspring, $31,000.

★Tex., Ft. Worth—Tarrant Co. Comrs. let contract graveling 3-mi. road, connecting Dallas Co. Pike with Tarrant Co. Cardina Rd. to P. F. McGee, Arlington.

★Tex., Galveston—City let contract surfacing 27,000 sq.yd. shelled streets to Finley Method Co., Galveston.

★Tex., Tyler—City let contract paving portions East Locust, North Bois d'Arc and Elm Sts., 1-mi. clay to Southern Paving Co., 1309 Bush Bldg., Dallas.

★Okla., Oklahoma—City let contract paving 30th and 32nd Sts., sheet asphalt, to Western Paving Co., Terminal Bldg., $1.94 per sq.yd.

★Okla., Pauls Valley—City let contract paving Willow St. to Struble & Mitchell, Pauls Valley, $23,015.

★Okla., Tulsa—City let contract paving 150,000 yds. to Eureka Paving Co., 1115 Carter Bldg., Houston. Noted Aug. 9.

★Utah, Ogden—City let contract Dist. 127, paving portions 26th Ave. to P. J. Morgan, 52 West 2nd St., $40,956.

★Wash., Camas—City Council let contract, paving Beeson St., 2-in. bitulithic, to United Contr. Co., Northwest Bank Bldg., Portland, Ore. About $13,519.

★Wash., Granite Falls—City let contract sidewalks, concrete, to Superior Constr. Co., 4th Ave., Northeast and East 8th St., Seattle, $11,000.

★Wash., Kalama—Cowlitz Co. Comrs. let contract building Pacific Highway, 2½ mi. permanent highway No. 3 to Jarvis & Berkheimer, Portland, $44,600. Noted June 28.

★Wash., Port Angeles—City let contract paving I St. to E. Anderson, Port Angeles, $44,990. Noted June 28.

★Wash., Port Angeles—City let contract paving L. I. D. No. 50, to Bullock & Co., Port Angeles, $15,913.

★Wash., South Bend—Pacific Co. Comrs. let contract building portion National Park Highway to Allred & James, Centralia, $10,000. Noted June 28.

★Wash., Spokane—Spokane Co. Comrs. let contract paving Madison Highway, 1 mi. one course concrete through Valleyford to Baylor, Murphy and Pearson, Spokane, $15,178.

★Oregon—State Highway Comn., Salem, let contracts, Columbia River Highway to A. D. Kern, Portland, grading 3 mi. Viento Sect., $71,033, 2 mi. Ruthton Hill, $39,988 and 8.2 mi. near Cascade Locks, $105,930; to Warren Constr. Co., Journal Bldg., Portland, grading Goble Hill, $42,300 and to A. L. Clark, c/o Washington Paving Co., L. C. Smith Bldg., Seattle, grading Rainier Hill, $11,880.

Oregon—State Highway Comn., Salem receive low bids paving Rex-Tigard Rd. from O. Huber, $265,415; Astoria-Swenson Rd., Warren Constr. Co., 14 Association Bldg., Portland, $155,763; Marion-Clackamas Rd., Oregon Hassam Paving Co., $135,954.

★Ore., Astoria—City let contract paving Cedar St., bitulithic, to Miller & Bauer, Astoria, $36,982.

★Cal., San Francisco—Bd. Pub. Wks. let contract, paving Arkansas St., to Federal Constr. Co., Sharon, Bldg. About $12,539.

★Cal., Upland—City let contract grading and oiling 6th Ave. to J. S. Menfee, Watts, 4.95c. per sq.ft., concrete curbs, 24.95c. per ft.

★N. S., New Glasgow—City let contract paving South St., bitulithic, to Warren Paving Co., McKinnon Bldg., Toronto, $15,000.

★Ont., New Hamburg—Council let contract paving streets, concrete, to Queen City Concrete Paving Co., 179 Broadview Ave., Toronto, $16,000. Noted July 12.

★B. C., Burnaby—City let contract paving Barnet Rd. to M. P. Cotton Co., Vancouver, $15,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Virginia—Petersburg, Hopewell & City Point Ry. of Petersburg, incorporated with $1,000,000 capital stock, plans to take over Petersburg & Appomattox Electric Ry., with 9 mi. line from Petersburg to Hopewell and Hopewell & City Point Ry. operating from Hopewell to City Point, about 2-mi. and will build 6-mi. branch line to Prince George Courthouse, also 2-mi. second track from Petersburg to Camp Lee. R. Mann, Petersburg, pres.

West Virginia — Monongahela Valley Traction Co. preparing plans for extension line from Bridgeport to Rosemont. Flemington, Galloway, Wendell and Simpson. R. D. Henner, Morgantown, Pa., ch. engr.

North Carolina—Chimney Rock Ry. incorporated with $300,000 capital stock has been granted permission to build 25 to 30 mi. railroad from Rutherfordton to Chimney Rock. T. C. Cole, Black Mountain, J. C. Cole, Canton and others, stockholders.

Georgia—Georgia Ry. and Power Co. plans to build 5-mi. line to Camp Gordon, near Chamblee. G. W. Brine, Electric and Gas Bldg., Atlanta, vice-pres. and mgr.

Louisiana—New lines, about 35 mi. in all, proposed to connect Kinder & Northwestern Ry. with other local lines, mainly lumber service. A. Mead, Kinder, vice pres.

Tennessee—Central R.R. Georgia controlled by Illinois Central R.R. preparing plans extending line from Chattanooga to Johnson Stand or Crossville, about 65 mi. H. R. Manby, Nashville, act. supt.

Ohio—Canton & Ohio River Rys. of Pittsburgh has been organized with $10,000,000 capital stock under laws of Ohio and West Virginia by Cincinnati, Canton and Cleveland men for promoting project to build 105-mi. electric railway from Canton, Ohio, to Wheeling, W. Va., via Toronto, Ohio.

Minnesota—Electric Short Line Ry. plans 14-mi. line south from Hutchison. E. D. Luce, Minneapolis, genl. mgr.

Texas—Gulf & East Texas R.R. of Hicks recently incorporated plans to build 10-mi. line from Hicks to Wursbaugh. E. R. Campbell and A. E. Ammerman, Union Natl. Bank Bldg., Houston, and others incorporators.

Texas—M. B. Hereley of Chicago and associates plan 175-mi. railroad from Lubbock, Tex., to Roswell, N. M. Atchison, Topeka & Sante Fe R.R. interested.

New Mexico—Atchison, Topeka & Santa Fe R.R. plans 150-mi. line from Carlsbad to El Paso, Tex. F. M. Bisbee, Amarillo, Tex., ch. engr.

Utah—Utah Light & Traction Co. plans to lower tracks 3000 ft. on South State St. About $26,000. H. L. Beach, Salt Lake City, genl. mgr.

Arizona—Ray-Hercules Copper Co. of Ray plans to spend $200,000 to build railway to connect with Ray and Gila Valley system.

Washington—City Council of Tacoma issued $180,000 bonds to build, extend and equip 11th St. line to east side of bay to connect with ship yards. C. D. Atkins, comr. pub. wks.

California—Pacific Electric R.R. granted franchise to extend interurban road from Santa Ana to Tustin, about 5-mi. G. E. Pillsbury, Los Angeles, ch. engr.

California—Pacific Electric Ry. plans to build line from Glendora and San Dimas.

Ontario—Canadian Pacific Ry. plans to lengthen sidings and strengthen bridges between London, Ont. and West Toronto. About $185,000. W. E. Woodhouse, Montreal, ch. engr.

BIDS DESIRED

Pennsylvania—(Official)—Until Aug. 30, by Atlas Powder Co., Wilmington, building 2-mi. railroad; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Alabama—Muscle Shoals Traction Co. let contract 64-mi. interurban line from connection with Louisville & Nashville and Southern Ry. at Florence to Huntsville to Central States Constr. Co., Indianapolis.

EXCAVATION AND DREDGING

Proposed Work

Tenn., Selmer — Canal — Lower Cypress D.D. No. 10, McNairy Co., soon lets contract drainage system involving 12-mi. canal with 3 laterals and 481,785 cu.yd. excavation. S. J. Dalton, Boonville, Miss., engr.

O., Urbana—Creek Improvement—Shelby and Champaign Cos. soon lets contract improving Mosquito Creek for about 12 mi. About $42,779.

Minn., Fairmont—Ditches — Martin Co. prepared plans building Judicial Ditches No. 79 and 80. About $24,759 and $12,630 respectively. H. C. Nolte, aud.

N. D., Fargo—Canals—Cass Co. prepared plans building 8 open drainage canals, involving 80,000 acres of land. These canals are to be so built as to make tile drainage feasible. Ultimate discharge will be into Mapleton, Sheyenne and Red Rivers. About $325,000. S. F. Crabble, Fargo, engr.

Mo., Warrensburg — Drainage—Johnson Co. rejected bids for Big Creek D. D. No. 2. New bids. C. E. Jacoby Eng. Co., 514 Shukert Bldg., Kansas City, engrs.

Tex., Wharton—Irrigation—Wharton Co. Irrigation Co., incorporated with $100,000 capital stock, plans to build system of irrigation involving pumping plant. J. W. Jolly, El Campo, stockholder.

Okla., Altus—See "Miscellaneous."

Cal., Dos Palos—Irrigation—City plans to organize irrigation district to be known as Tierra Loma Irrigation Dist., involving 92,000 acres, 52 mi. canal and 288 mi. 1-ft. laterals. About $200,000. D. N. Steyer, South Dos Palos, chn.

BIDS DESIRED

N. Y., Albany — (Official) — Canal Improvements—Until Aug. 21, by W. W. Wotherspoon, supt. pub. wks., improving canals; advertised in this issue.

N. C., Winston-Salem—Until Aug. 28 by Forsyth Co. D.D. No. 1, building drainage system involving 20-mi. canal.

Fla., Tallahassee—(Official)—Excavation —Until Aug. 30, by Bd. Comrs. Everglades D.D., excavating Caloosahatchee Canal between La Belle and Citrus Center. F. C. Elliott, engr.

Ia., Sac City—Drainage—Until Aug. 22, extension of date by E. M. Moyer, aud. Sac County, building drainage ditches, Big Cedar D. D. No. 181 of Sac, Buena Vista, Pocahontas and Calhoun Counties. Noted July 12.

Ia., Spencer—Drainage—Until Aug. 22, by Clay Co. for work on D.D. No. 54. A. W. Chamberlain, aud.

Minn., Detroit—Ditch—Until Aug. 30, by J. A. Narum, Becker Co. aud., building county Ditch No. 19, involving 65,138 cu.yd. excavation.

Minn., Glenwood—Ditch—Until Aug. 20, by O. Irgens, Pope Co., aud., building Co. Ditch No. 15, involving 84,332 cu.yd. excavation main ditch, 45,373 cu.yd. in branches. About $14,269.

Minn., Mora—Ditch—Until Aug. 18 by A. V. Sanders, Kanabec Co., aud., building Co. Ditch No. 11, involving 258,634 cu.yd. excavation, also building rein.-con. bridge and culverts. About $44,089.

Colo., Lamar—Drainage—Until Aug. 22, by Wiley D. D., Prowers Co., building 9¼ mi. open drain ditch, bottom width 4 ft., involving 43⅓ mi. 6- to 18-in. tile drain. G. R. Wilson, secy.

Ont., Greenock—Ditch—Until Aug. 20 by T. H. Purdy, Glammis, P. O., building 3⅓-mi. ditch involving 15,500 cu.yd. excavation.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—Comn. Waterways and Pub. Lands, State House, received low bids (a) dredging 25,000 cu.yd. material, Sandwick Harbor, (b) 21,000 cu.yd. Scituate Harbor, (c) 7000 cu.yd. Herring River, Harwich, (d) dredging 12,000 cu.yd. and placing 900 tons rip rap, Ellisville Harbor, Plymouth, from Bay State Dredge Co., 247 Atlantic Ave., (a) 60c. cu.yd., (b) $.385 (c) 82c., (d) .79 cu.yd. and $7.00 ton; J. R. Burke, 78 Devonshire St., (a) 70c. (b) 43c. (c) 65c.; Boston Dredge Co., 40 Central St., (b) $.365; D. F. Crowley, East Milton, 78c. cu.yd. and $3.65 per ton.

★N. J., Jersey City—Dredging—City let contract dredging and deepening Hudson River, foot of Morgan St. to P. S. Ross, 277 Washington St., $10,000. Noted July 26.

★Tenn., Dyersburg—Drainage—Dyer Co. let contract Lewis Creek D.D. involving 8-mi. ditch to N. C. McGinnis & Co., Exchange Bldg. Noted July 12.

★Ind., La Grange—Ditch—La Grange Co. let contract building Davis Lein D.D., 7 mi. long to W. A. Daniels, Auburn and C. A. Walb, La Grange.

★Mich., Centerville—St. Joseph Co. let contract building tailrace for power development on St. Joseph River, involving 100,000 yd. excavation, 100 yd. retaining walls to G. W. Bunker Co., 1570 Robinson Rd.

★Ia., Mason City—(Official)—Drainage—Cerro Gordo Co. let contract building D.D. No. 51 to J. Brark, Clear Lake, $15,337. Noted Aug. 2.

★Ia., Webster City—Hamilton Co. let contract building drains, Barth Drainage Dist. No. 212 involving 23,985 ft. 14- to 26-in. tile to Hildal & Peterson, Jewel and Natl. Sewer Pipe Co., Webster City.

★Ia., Webster City—Drainage—Hamilton Co. let contract Barth D. D. No. 212 as follows: Material to National Sewer Pipe Co., Sioux City, $14,998; labor to Hudal & Peterson, Jewel, $10,193.

★Minn., Bagley—Ditch—Clearwater Co. let contract Co. Ditch No. 3, involving 176,082 cu.yd. excava. to J. F. Flanagan Contr. Co., Alexander, 11.74c. per cu.yd.

★Minn., Detroit—Ditch—Becker Co. let contract building extension of branch No. 7 on Co. Ditch No. 15 involving 105,138 cu. yd. excavation, etc. to Northern Minnesota Drainage Co., Litchfield. Noted July 5.

★Minn., Ivanhoe—Ditch—Lincoln Co. let contract open work Ditch No. 31 to Kohler Contr. Co., Frazee, $17,950; Ditch No. 35 to Amer. Drainage Co., Thief River Falls, $35,017.

★Minn., Mankato—Ditch—Blue Earth Co. let contract building Co. Ditch No. 47 to Brick & Tile Yards, New Ulm, $37,875. Noted Aug. 2.

★Ore., Bend—Irrigation—Comrs. Suttle Lake Irrigation Project let contract involving 15,000 acres to C. M. Wickham, Portland, $750,000.

INDUSTRIAL WORKS

Proposed Work

Conn., New Haven — New York, New Haven & Hartford R.R. having plans prepared 95 x 360 ft. roundhouse and 1-story, 40 x 70 ft. machine shop here. Edward Gagel, ch. engr.

N. Y., Albany—Burdick & Son, c/o B. W. Burdick, 72 Hamilton St., plans 4-story, 67 x 160-ft. factory, Hamilton and Mosier Sts. About $50,000. Obenhaus, Nichols Co., 119 State St., archts.

N. Y., Buffalo—F. N. Burt, 540 Seneca St., had plans prepared by W. A. Kidd, archt., 240 Delaware Ave., 7-story, 84 x 124-ft. factory, Seneca and Hamburg Sts. About $175,000.

N. Y., Homer—Newton Fish Line Co., South Main St., plans to rebuild plant recently destroyed by fire. About $50,000.

N. Y., New York—A. Gaw, 319-323 West 77th St., plans remodeling 3, 5-story stables. About $70,000. F. B. Flatt, 101 Park Ave., archt.

N. Y., Syracuse—Onondaga Steel Co., East Water St., plans 3 new additions to plant.

N. Y., Tottenville, S. I.—O. E. K. Jackson, care of Jackson & Duncan, 79 Wall St., New York City, recently organized company and plans shipbuilding plant, Arthur Kill Rd.

N. J., Camden—H. Tiedemann, 19th St. and Washington Ave., Phila., plans 1-story, 70 x 200-ft. woodworking plant, Haddon Ave. About $75,000.

N. J., Jersey City—City Comn. will sell $1,038,000 bonds and plans freight terminal on New York Bay. Address J. Milton, 15 Ex. Pl.

N. J., Jersey City—C. F. Mueller Co., 180 Baldwin Ave., increased capital stock from $500,000 to $2,000,000 and plans extensions.

Pa., Phila.—Lanston Monotype Machine Co., 24th and Locust Sts., soon lets contract 5-story, 50 x 125-ft. plant, 24th and Locust Sts.

Pa., Phila.—Snyder & Co., 134 North 10th St., having plans prepared, 5-story, 31 x 104 ft., brick, steel and concrete warehouse and store. Peuckert & Wunder, 310 Chestnut St., archt.

Pa., Temple—Temple Malleable Iron & Steel Co. plans to build several new additions to plant. About $500,000.

Pa., Williamsport—Lycoming Rubber Co., Rose and Erie Aves., plans 5-story, 64 x 100-ft. addition, Rose Ave. About $400,000.

Industrial Work (Continued)

Md., Fairfield—Riter-Conley Co., Morris Bldg., Pittsburgh, plans large addition to shipbuilding plant including shipbuilding berths, bulkheads, piers and shops.

W. Va., Martinsburg—Berkley Woolen Mills had plans prepared, 4-story, 65 x 160-ft. addition, Raleigh St. About $100,000. P. O. Keilholtz, Continental Bldg., Baltimore, archt.

N. C., Charlotte—Natl. Sanitation Co. recently organized with capital stock of $100,000 and plans to build.

La., Cedar Grove—Western Carbon Co., subsidiary of Columbia Carbon Co., soon lets contract building plant here. About $125,000.

La., New Orleans—Bd. Comrs., 200 New Orleans St., plans multiple story, rein.-conc., warehouse. Address W. B. Thompson, pres.

O., Akron—Akron, Canton & Youngstown R.R. plans large freight terminal warehouse here. About $1,000,000 J. A. Donahey, ch. engr.

O., Akron—Kendall Tire & Rubber Co., soon lets contract factory and power house. About $100,000. W. C. Owen & Co., 449 Leader-News Bldg., Cleveland, archts.

O., Canton—American Motor Car Co., recently incorporated with capital of $100,000, soon lets contract 2-story, 60 x 100 ft. C. R. Volzer, pres.

O., Cleveland — Cleveland Switchboard Co., 430 West Prospect Ave., plans rebuilding plant recently destroyed by fire.

O., Cleveland—Colonial Woolen Mill Co., recently incorporated with capital of $100,000, plans blanket mill. J. N. Hahn, pres. W. S. Lougee, Marshall Bldg., archt.

O., Cleveland—Guide Motor Lamp Co., 11400 Madison Ave., has purchased site on Mandalay Ave., and plans new factory.

O., Cleveland — Morgan Lithographing Co., St. Clair Ave., N. E., and East 3rd St., plans 3-story, 138 x 250 ft., Payne Ave., N. E. About $150,000.

O., East Cleveland—(Cleveland P. O.)—Cleveland Motor Plow Co., Euclid and Lamb Aves., Cleveland, receives bids about Aug. 20, 1- and 2-story, 100 x 500 ft. About $200,000. R. White, pres. G. S. Rider Co., 512 Century Bldg., archts., both of Cleveland.

O., Licking View—Rotary Tire and Rubber Co., Zanesville, plans large brick factory, Licking Rd. About $500,000.

Ill., Chicago—Standard Cap and Seal Co., 327 Wells Ave., plans 100 x 160-ft. factory. About $150,000. O. N. Tevander, pres. Davidson & Weiss, archts.

Mo., Kansas City—City plans election Oct. 2 to vote on $1,000,000 bond issue for lighting plant.

Tex., Deweyville—Sabine Tram Co. plans large lumber mill plant and concrete building to contain engines, boilers, machine shop and blacksmith shop. About $150,000. C. E. Walden, Beaumont, pres.

Tex., Houston—Texas Development and Refining Co. has increased its capital stock from $100,000 to $500,000 and plans addition to plant.

Idaho, Rigby—Beet Growers Co., Idaho Falls, plans 600-ton beet sugar factory.

Cal., Alameda—N. Clark & Son, Alameda, plans to rebuild pottery plant recently destroyed by fire. About $250,000.

Cal., Fresno—Fresno Planing Mill plans to build plant. About $80,000. A. W. Bernhauer, pres.

Cal., Stockton—Union Ice Co. plans to build plant. About $65,000. W. Toepke, 46 Kearny St., San Francisco, archt.

B. C., Anyox—Granby Consolidated Mining, Smelting and Power Co. plans coke manufacturing plant here. About $1,500,000.

BIDS DESIRED

O., Columbus—(Official)—Until Sept. 4 by O. E. Steele, business mgr., Ohio State University, brick and steel power house. About $135,000.

Wash., Seattle—Until Aug. 31 by Bd. Pub. Wks., building complete hydro-electric light and power plant involving continuous capacity of 13,000 kw.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Vt., Bennington—E. L. Sibley Mfg. Co. let contract 2-story, 60 x 157-ft., brick, to Kingsbury Constr. Co., Hudson Falls, N. Y.

★N. Y., New York—New York Butchers Dressed Meat Co., 11th Ave. and 39th St., let contract 7-story, 100 x 125-ft. plant, 11th Ave. and 40th St., to Blome Sinek Co., 120 Bway. About $250,000.

★N. Y., Rochester—Symington-Anderson Co. let contract 227 x 650-ft. brick factory, University St., to Crowell-Lundroff-Little Constr. Co., 1951 East 57th St., Cleveland. About $280,000.

★N. J., Trenton—American Steel & Wire Co., Hamilton Ave., let contract 1-story, 50 x 70-ft. machine shop and 175 x 310-ft. rope shop to J. H. Morris, Broad St. Bank Bldg. Noted Aug. 9.

★Pa., Phila.—Rex & Co., Inc., 2410 North Philip St., let contract 5-story, 52 x 113-ft. brick warehouse, American and York Sts., to S. B. MacDowell & Son, 1927 West Montgomery Ave. About $70,000.

★Del., Wilmington—W. Freihofer Baking Co., Pennsylvania and Lincoln St., Phila., let contract 3- and 4-story, 60 x 100-ft. brick baking plant to Concrete Constr. Co., 1620 Thompson St., Phila. About $75,000.

★O., Orrville—Ohio Blower Co., 5125 Perkins Ave., let contract new factory to A. A. Lane, 820 Columbus Bldg. About $150,000. Noted July 26.

★Ind., Indianapolis—Pennsylvania Lines West let contract, brick and rein.-con. engine house and annex, to Alliance Constr. Co., Indianapolis.

★Mich., Detroit—Ford Motor Co., Woodward Ave. and Detroit Terminal R.R., let contract 4-story, rein.-conc. addition to factory A, to H. G. Christman Co., 315 Stevens Bldg.

★Mich., Detroit—Michigan State Telephone Co., Washington and Clifford Sts., let contract 3-story, rein.-conc. telephone building, Hubbard St., to H. G. Christman Co., 315 Stevens Bldg.

★Mich., Detroit—Parisian Realty Co., 915 Ford Bldg., let contract 3-story, rein.-conc. laundry plant, West Elizabeth and 3rd Sts., to A. W. Kutscke & Co., 814 Ford Bldg. About $80,000.

Mich., Detroit—L. Smilansky let contract 3-story steel warehouse, store and theater, West Fort St., to F. Swireky & Co., 201-204 Equity Bldg.

★Ill., Chicago—E. J. Barker, 556 West Jackson Blvd., let contract 2-story brick plant, 4247-57 Western Ave., to Shumann Constr. Co., 58 East Washington St.

★Ill., Chicago — Commonwealth Edison Co., Clark and Adam Sts., let contract altering power house and building 1-story brick locomotive house and concrete ashpit, 22nd and Fisk Sts., to G. A. Fuller & Co., 140 South Dearborn St. About $236,000.

★Minn., Minneapolis—G. W. Todd, 403 Brandeis Bldg., let contract 3-story, 66 x 132-ft. warehouse to W. Maier, 415 South 42nd St. About $50,000.

★Cal., Crockett—California & Hawaiian Sugar Co. let contract, addition to plant, to Lindgren & Co., Monadnock Bldg., San Francisco. About $1,500,000.

★Cal., San Francisco—Atchison, Topeka & Santa Fe R.R. let contract, brick and mill-construction warehouse to C. L. Wold Co., 75 Sutter St. About $59,294.

BUILDINGS

Proposed Work

Mass., Wrentham — Dormitory — Comn. Mental Diseases plans. Kendall, Taylor & Co., 93 Federal St., Boston, archts.

N. Y., Albany—School—Bd. Educ. plans, 2-story. About $50,000. I. Wachsman, secy. bd. control and supply, City Hall. Fuller & Robinson, 95 State St., archts.

N. Y., Buffalo—Church—St. Marys Congregation plans to build, in Hertel Ave. dist. About $65,000.

N. Y., Cohoes — Church — St. Josephs Congregation, Cohoes, plans 3-story, 40 x 70-ft. and wing. Rev. A. Lavigne, 65 Congress St., pastor.

N. Y., Lake Placid—High and Grade School—Bd. Educ. plans, 2-story. About $125,000. Pember & Campaigne, 24 James St., archts.

N. Y., New York—Libraries—American Library Assn. plans 32 libraries, various Army and National Guard Camps. About $320,000. F. P. Hill, 26 Brevoort Pl., Brooklyn, chn. E. L. Tilton, 52 Vanderbilt Ave., archt. and engr.

N. J., Passaic—Theatre—Harris Bros., 184 4th St., plans 1-story, 75 x 100-ft. About $60,000. A. Preiskel, Hobart Trust Bldg., archt.

N. J., Red Bank—School Bd. Educ. plans 2-story, 60 x 90 ft., brick and stone, Shrewsbury Ave. About $60,000. F. M. Truex, 1170 Bway., New York City, archt.

Pa., Eddystone — Convent — St. Rose of Lima Congregation plans, 4-story. About $50,000. Rev. T. F. Ryan, Chester Rd., pastor. Henon & Boyle, 10 South 18th St., Phila., archts.

Wash., Seattle—Temple—Seattle Central Labor Council plans 10- or 12-story, 1[illegible] x 120 ft., near present temple. F. A. [illegible], chn. bldg. com. J. A. Duncan, 1728 [illegible] St., secy.

Wash., Spokane—Theater—Alex. Pantages, Pantages Theater Bldg., had plans prepared by B. Marcus Priteca, archt., Pantages Theater Bldg. About $150,000.

Cal., Long Beach—Schools—City election Sept. 6 to vote on $100,000 bond issue to build schools.

Cal., Los Angeles—Hospital—Bd. Supvrs. Ventura, Los Angeles and Santa Barbara Cos. plan tuberculosis hospital, Los Angeles Co. About $100,000. Wm. Davidson, Hall of Records, archt.

Cal., San Diego—Becker Bros. had plans prepared, altering building, by Eugene Hoffman, Spreckels Bldg. About $50,000.

Cal., San Francisco—Office—B. G. McDougall, 461 Market St., having plans prepared, 2-story addition to Sheldon Bldg. About $70,000.

Cal., San Francisco—School—City plans $3,500,000 bond issue, building and improving schools. J. S. Dunnigan, city clk.

Ont., Stratford—Theater—W. I. Kemp, 69 Nile St., having plans prepared, brick. About $60,000.

BIDS DESIRED

N. H., Laconia—(Official)—Dormitory—Until Aug. 21 by Bd. Trustees, State House, Concord. C. Whitcher, state archt. Noted July 12.

Mass., Boston—Hospital—Until Aug. 23 by City Hospital, 818 Harrison Ave., ward buildings and alterations. About $75,000. Jos. McGinniss, 16 Arlington St., archt.

Mass., Boston—School—Until Aug. 21 by Bd. Educ., 3-story, 120 x 176-ft. brick and stone, Charter & Phipps Pl. About $150,000. J. McGinniss, 16 Arlington Pl., archt.

Conn., Hamden—Schools—Until Aug. 22, by Bd. Educ., Dixwell Ave. and Newhall and Morse Sts. Kelly & Loth, 113 Church St., New Haven, Conn.

N. Y., Brooklyn—Hospital—Until Sept. 5 by Cumberland St. Hospital, Auburn Pl., c/o City. About $600,000. Ludlow & Peabody, 101 Park Ave., New York City, archts.

N. C., Raleigh—(Official)—Administration, Kindergarten, Etc.—Until Aug. 23 instead Aug. 16 by Bd. Dirs. State School for Blind. About $150,000. F. K. Thompson, Raleigh, archt. Noted Aug. 9.

O., Columbus—School—Until Aug. 30 by Bd. Educ., Perry Twp., Franklin Co. Cree Sheets, 33 North High St., archt.

O., Lakewood—High School—Until Sept. 4 by P. T. Harrold, clk. bd. educ., 2-story. W. Hopkinson, 900 Rose Bldg., Cleveland, archt. Noted July 19.

O., London—School—Until Aug. 30 by Bd. Educ., Jefferson Twp., Madison Co., Centralized School Dist. Howard & Merriam, 8 East Broad St., Columbus, archts.

Wis., Hudson—High School—Until Aug. 28, by Dist. Bd. Parkinson & Dockendorff, Linker Bldg., LaCrosse, archts.

Ia., Dike—School—Until Aug. 28 by Bd. Educ., 3-story, 70 x 120-ft., brick and tile. About $65,000. W. L. Pedicord, Dike, archt. Noted Aug. 9.

Ia., Mingo—School—Until Aug. 24 by S. M. Berkeley, pres. bd. educ., 2-story, 60 x 90-ft., brick. About $50,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., Des Moines, archt.

Ia., Newton Junior High School—Until Sept. 5 by H. B. Allfree, pres. bd. educ. Temple & Burrow, 63 Davenport Savings Bank Bldg., Davenport, and Fugard & Knapp, 111 Monroe St., Chicago, archts. Noted Apr. 26.

Minn., Fairmont—School—Until Aug. 21. by Bd. Educ., East Chain Twp. G. Pass & Son, Mankato, archts.

Neb., Lincoln—Social School—Until Sept. 1 by J. S. Dales, secy. University. About $300,000.

Neb., York—High School—Until Aug. 21 by Bd. Educ., 2-story, 80 x 220 ft. brick, stone and rein.-conc. About $60,000. W. W. Wyckhoff, secy.

S. D., Conde—Municipal—Until Aug. 30 by J. P. Wolf, aud., 2-story. G. F. Fossum, Wells Blk., Aberdeen, archt.

Okla., Oklahoma — (Official) — Station — Until Sept. 15, by Frisco R.R. About $300,000. Lebebbaum, Marx & Vigeaut, 175 West Jackson Blvd., Chicago.

Okla., Tulsa—Club—Until Aug. 20 by A. W. Roth, pres., Y. W. C. A., 4-story, 90 x 150 ft. About $150,000. C. K. Birdsall, 1002 Commerce Bldg., Kansas City Mo., archt.

Buildings (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I., Woonsocket—School—Bd. Educ. let contract 2-story, 65 × 90 ft. to J. F. Fleurent & Son, 159 Rathbun St. About $50,000. Noted June 21.

★N. Y., New York—Office—E. M. Ferriday, 31 East 50th St., let contract to M. Rikes, 891 East 172nd St. About $100,000.

★Pa., Doranceton—School—Bd. Educ. let contract 2-story, 30 x 82 ft. to M. L. Roth, 125 South Welles St., Wilkes-Barre. About $60,000.

★Md., Admiral—Building—War & Work Council International Y. M. C. A., 124 East 28th St., New York City, let contract 10 Y. M. C. A. buildings to Claiborne & Johnson Co., Inc., Garrett Bldg., Baltimore. About $60,000.

★Md., Baltimore—School—Bd. Educ. let contract 1-story, 30 x 225-ft., Liberty Heights Ave. to W. E. Burnham, Law Bldg. About $50,000.

★O., Cleveland — Church — Hough Ave. Congregation let contract 2-story, 72 x 80 ft., brick, Hough Ave., to King-Griffin Constr. Co., Engineers Bldg. About $60,000.

O., Cleveland—School—Bd. Educ. received low bid, addition to Empire School, Empire Ave., from Bolton & Pratt Constr. Co., Columbia Bldg. $76,000.

★Mich., Detroit — Nurse Home — Bd. Health let contract, 3-story, rein.-conc. to Culbertson & Kelley, 814 Ford Bldg. About $135,000.

★Mich., Detroit—Store—H. L. Bowles Co., 412 Bowles Bldg., let contract 6-story, concrete and steel, Gratiot St., to A. A. Albrecht Co., 1130 Penobscot Bldg. About $100,000.

★Mich., Muskegon—Official—Union Lodge let contract to Buck & Muller, percentage plan. About $65,000.

★Ill., Aurora —(Official)— Sanatorium—Miller Diabetis Sanatorium let contract, 3-story, 60 x 100 ft., to J. MacKimmie, 296 Iowa Ave. About $80,000. Noted Aug. 9.

★Ia., College Springs—High and Grade School—Bd. Educ. let contract, 3-story, 72 x 134-ft., brick, to S. Hotchkiss, 18th and Penn. St., St. Joseph, Mo. About $65,000.

★Kan., McPherson—School—Bd. Educ. let contract, 2-story, brick, stone and rein.-conc., to J. W. Flanagan Constr. Co., 2836 Benton Blvd., Kansas City, Mo. About $50,000. Noted Aug. 2.

★Kan., Topeka — Storehouse — Atchison, Topeka & Santa Fe R.R. let contract, brick and rein.-conc., to F. M. Spencer & Son, Mulvane Bldg. About $200,000. Noted Aug. 9.

★Kan., Wichita —(Official)— Hotel — H. Lassen, Wichita, let contract to Selden-Breck Constr. Co., Central Natl. Bank Bldg., St. Louis. About $500,000. Noted Aug. 9.

★Mo., St. Louis—College—Poro College let contract to J. Hill, 915 Olive St. About $50,000.

★Mo., St. Louis—School—Bd. Educ. let contract 2-story, 80 x 110-ft., to Murch Bros. Constr. Co., Railway Ex. Bldg. About $134,840.

★Mo., Trenton—School—Bd. Educ. let contract, 3-story, brick and stone, to J. J. Hoffman, Milan. About $75,000.

★Tex., Dallas—Theater—Majestic Theater Co. let contract, steel construction, Elm St., to Austin Bros., 1815 Coombs St., Dallas. Total cost, about $100,000.

★Okla., Stillwater—Court House—Payne Co. let contract, 4-story, brick, stone and rein.-conc. to Lisle-Dunning Constr. Co., Oklahoma City. About $125,000. Noted July 12.

★Colo., Denver—Stadium—City let contract, Court of Civic Benefactors and stadium, Civic Center, to Edward Seerie Co., 605 Continental Bldg. About $181,000.

★Ariz., Bisbee—High School—Bd. Educ. let contract to J. W. Tucker, Lowell. About $59,150. Noted Apr. 17.

★Cal., Fresno—Union Natl. Bank, care of W. O. Miles, pres., let contract 2-story, 50 x 96 ft., Mariposa St., to H. H. Winner, Nevada Bank Bldg., San Francisco. About $50,000.

FEDERAL GOVERNMENT WORK

Proposed Work

Mass., Winchester — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids. Noted Aug. 9.

Wash., North Yakima—Storage Reservoir—U. S. Rec. Ser. making surveys at Hells Crossing on American River.

Wash., Tacoma—Hospital—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., prepared plans involving 59 buildings. About $500,000.

Ore., Oregon City—Locks—Government appropriated $80,000 for locks.

Ariz., Globe—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids

BIDS DESIRED

Mass., Hingham—Magazine Storehouse—Until Aug. 27 by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash.

N. Y., Brooklyn—Paving—Until Aug. 20, by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., paving Navy Yard, granite block.

N. Y., Buffalo—Metal Work—Until Aug. 20, by Lighthouse Inspector, furnishing metal work for 1 steel tower; advertised in this issue.

N. Y., Cohoes—Post Office—Until Sept. 24 by J. A. Wetmore, superv. archt., treas. dept., Wash.

Pa., Phila.—Heating System—Until Aug. 27, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., at Machine and electric shop.

Wash., D. C.—Refuse and Garbage—Until Sept. 5, by L. Brownland, comr. Dist. of Columbia, collecting and disposing of miscellaneous refuse and garbage, etc.; advertised in this issue.

Wash., D. C.—Storm Warning Lanterns—Until Aug. 21, by U. S. Dept. Agriculture, furnishing storm warning lanterns; advertised in this issue.

S. C., Port Royal—Buildings—Until Aug. 20, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., for 2 buildings for officers' quarters. Noted July 26.

Ind., Kendallville — Post Office — Until Sept. 21 by J. A. Wetmore, superv. archt., treas. dept., Wash., advertised in this issue.

Mich., Detroit—Backfilling—Until Sept. 4, by U. S. Engr. Office, for backfilling walls, 4th Lock, St. Marys Falls Canal.

Cal., San Pedro—Fill—Until Aug. 31, by U. S. Engineers Office, 723 Central Bldg., Los Angeles, for fill involving 120,000 cu. yd. rip rap protection.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I., Melville — Extending Fuel-Oil Storage Plant—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., let contract to J. W. Danforth Co., 70 Ellicott St., Buffalo, $294,394. Noted Aug. 9.

★N. Y., Brooklyn—Emergency Building—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., let contract emergency building for receiving ship barracks, to Caldwell Wingate Co., New York City, cost plus 10%.

★Pa., Harrisburg — Storehouse — Bureau Yards and Docks, Navy Dept., Wash. let contract to J. L. Stewart & Co., 30 Church St., New York City, $400,000.

★Pa., Phila. — Aëroplane Factory — Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., let contract to Austin Co., 3028 North 16th St., $360,960.

★Pa., Phila.—Crematory—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., let contract to Morse-Boulger Destructor Co., 39 Cortlandt St., New York City, $13,835. Noted Aug. 9.

★Pa., Phila.—Repairs to Stokers—Bureau Yards and Docks, Navy Dept., Wash. let contract to J. G. Thomas, 34 South 17th St., $13,750.

★Wash., D. C.—Buildings—Bureau Yards and Docks, Navy Dept., Wash., let contract for 2 magazine buildings for Iona Island and 5 for Lake Denmark, N. J., to Snare & Triest, Woolworth Bldg., New York City, $136,500. Noted July 12.

★Wash., D. C.—Emergency Hospital—Bureau Yards and Docks, Navy Dept., Wash., let contract emergency hospital at Key West, Fla., to Ward & Price, cost plus percentage. Noted July 12.

★Wash., D. C.—Naval Air Stations—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., let contract for 2 on Long Island to J. Stewart & Co., 30 Church St., New York City; 1 on New Jersey Coast to Cramp & Co., Deckla Bldg., Phila.; 1 at Key West, Fla., to Florida Contr. & Eng. Co., Key West.

★Wash., D. C.—Road Work—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., let contract rebuilding portion wall on Canal Rd. to W. S. Cush, Wash., D. C., $24,000.

★Va., Richmond — Warehouse — Bureau Yards and Docks, Navy Dept. Wash., let contract to J. T. Wilson, Mutual Bldg., Richmond, $400,000

S. C., Charleston—Storehouse—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., received low bids from Feeney Sheehan Building Co., State House, Albany, N. Y., $210,415, 200 days; J. H. Wiese, 1301 City National Bank Bldg., Omaha, $239,860, 250 days; R. H. Arnold Co., 1035 Vermont Ave., $241,474, 120 days. Noted July 26.

★Ill., Great Lakes — Intake Pumping Plant—Bureau Yards and Docks, Navy Dept., Wash., let contract to Great Lakes Dredge & Dock Co., 104 South Michigan Ave., Chicago, $22,500.

★Neb., Chardon—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to C. E. Goodhand, Wahoo, $89,283. Noted Aug. 9.

MISCELLANEOUS

Proposed Work

Park—Batavia, N. Y.—City election soon to vote on $50,000 bonds to purchase 7.7 acres of land for park. R. F. Clark, city engr.

Port Improvements—Jersey City, N. J.—City Comrs. acquire Caven Point, will develop property for port improvements. About $1,000,000. C. A. Van Kuren, city engr.

Park—Trenton, N. J.—Pennsylvania legislature appropriated $25,000 for interstate park at Washington's Crossing. New Jersey to spend like amount. Address W. Edge, governor, Trenton.

Retaining Wall—Woodcliffe, N. J.—Bd. Freeholders Hudson Co. appropriated $50,000 to build retaining wall along bank of Woodcliffe, sloping to Hudson River.

Transmission Line—Greenville, S. C.—Southern Power Co. of Charlotte plans to build line to army cantonment. About $30,000.

Incinerator—Palm Beach, Fla.—Town voted $50,000 for incinerator and other improvements.

Dam and Retaining Walls — Marshalltown, Ia.—City preparing plans for dam and retaining walls over channel north of river at Center St. About $10,000. W. H. Steiner, city engr.

Subway—Parsons, Kan.—City plans election to vote on $60,000 bonds to build subway under tracks at Main St.-Missouri, Kansas & Texas lines to appropriate $60,000 toward cost. F. W. Frye, clk. L. F. Lonnbladh, Dallas, ch. engr.

Dam—Kansas City, Mo.—Bd. Pub. Wks. soon lets contract for 10 x 240-ft. near 9th and Blue River. About $50,000. Harrington, Howard & Ash, Orear-Leslie Bldg., engrs.

Dam—Altus, Okla.—City plans to build 7-mi. rein.-con. dam over North Red River to irrigate 66,000 acres of land.

Parks—Holdenville, Okla. — City issued $10,000 bonds to improve parks.

Tunnel—Los Angeles, Cal.—Bd. Pub. Wks. rejected bids for tunnel through Bunker Hill at 2nd St., from Hill to Figuerora St. Noted Apr. 12.

BIDS DESIRED

Elevated Railway—Pa., Phila.—(Official)—Until Aug. 21, by W. S. Twining, dir. Frankfort Elevated Ry. for steel framework, railings, concrete floors, etc.; advertised in this issue.

Retaining Wall—Lebanon, O.—(Official)—Until Aug. 20, by Warren Co. Comrs. building rein.-con. retaining wall, Rd. No. 31.

Breakwater—St. John Harbour, N. B.—Until Aug. 31 by R. C. Desrochers, secy. Dept. Pub. Wks., Dominion Government, Ottawa, for extension and repairs to breakwater.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Rip Rap—Boston, Mass.—See "Excavation and Dredging."

★Garbage Disposal Plant — Charleston, S. C.—City let contract 2-story, daily capacity 40 tons to Griscom-Russell Co., Land Title Bldg., Phila.

★Crib Removal—Cleveland, O.—Bd. Control let contract removal crib No. 5 at north end new water-works tunnel to Great Lakes Dredge and Dock Co., 1630 Williamson Bldg., $40,000.

Incinerating Plant—Kansas City, Mo.—City received low bids from Nye Odorless Crematory Co., $50,000 and $55,000; Herber & Foster, $58,667; Borge Incinerating Co., $62,458. Noted July 26.

★Pier Shed—San Francisco, Cal.—Bd. State Harbor Comrs. let contract to Carnahan & Mulford, 45 Kearney St., $63,807.

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until August 21, 1917.

Canal Improvements

STATE OF NEW YORK, OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, July 20th, 1917.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, August 21st, 1917, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

—1—

CONTRACT NO. 147.

Erie Canal—Section 11.

For constructing the substructure, superstructure and approaches of a bascule bridge across Tonawanda creek at Main and Webster streets, Tonawanda and North Tonawanda, N. Y.

Sheets 1 to 12 inclusive.

—2—

CONTRACT NO. 148.

Erie Canal—Section 8.

For constructing the substructure, superstructure and approaches of a highway bridge across Lock 27 and the Clyde river at Leach street, Lyons, N. Y.

Sheets 1 to 12 inclusive.

And for the construction of Barge canal, terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

—3—

TERMINAL CONTRACT NO. 55.

For constructing a pier, dolphins, etc., at Gowanus Bay, Borough of Brooklyn, New York.

Contract plans sheets 1 to 16.

Plans may be seen and detailed specifications, engineers' estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the City of Albany or New York, issued by a national or State bank (or trust company in the case of terminal contract), in good credit within the State and payable at sight to the Superintendent of Public Works for five percentum (5 per cent.) of the amount of the proposal.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a. m. for issue mailed the next day

PROPOSALS

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

PROPOSALS FOR LEVEE WORK.—Mississippi River Commission, U. S. Engineer Office, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 o'clock A.M., Aug. 24, 1917, and then publicly opened, for constructing about 3,400,000 cubic yards of earthwork in the Upper and Lower St. Francis and White River Levee Districts. Further information on application.

PROPOSALS

Bids received until September 10, 1917

North Hill Viaduct

FOR SUMMIT COUNTY

Akron, Ohio

Sealed proposals to be filed Margaret Rebel, Clerk, will be received by the Board of County Commissioners of Summit County, at Akron, Ohio, up to 11:00 A. M. central time, September 10th, 1917, for furnishing the materials and performing the labor necessary for the construction of the North Hill Viaduct, in Akron, Ohio.

The viaduct will be of reinforced concrete with an over-all length of about 2,790 feet, consisting of 16 arch spans varying in length from 116 feet to 191 feet, and of 12 short girder spans. A roadway 52 feet wide and two sidewalks, each 10 feet wide are provided. Certain piers will rest on sand and gravel; others on concrete piles.

Payments will be made in cash and monthly estimates will be rendered. All bids shall be accompanied by a check of the bidder, certified to by a solvent bank in the State of Ohio, made payable to Board of County Commissioners, for an amount of five per cent. of the bid, to be forfeited as liquidated damages (but not a penalty) by any bidder who is awarded a contract and who fails promptly and properly to execute the contract and bond. Upon the execution of the contract and bond by the successful bidder, said check will be returned to him and the checks of unsuccessful bidders will be returned to them. The contract will be awarded to the lowest responsible and competent bidder, but the Board reserves the right to reject any and all bids and to waive informalities.

Conforming to Ohio General Code, bids will also be received on alternate designs prepared by the bidder, providing certain requirements are complied with.

Plans and specifications are on file in the office of the County Auditor, Akron, Ohio, and in the office of Harrington, Howard & Ash, Consulting Engineers, Kansas City, Missouri. Copies of the plans and specifications may be secured from the Consulting Engineers by depositing twenty-five dollars. Such plans and specifications are to be returned upon request, at which time refund of twenty dollars will be made.

Bids received until August 17, 1917.

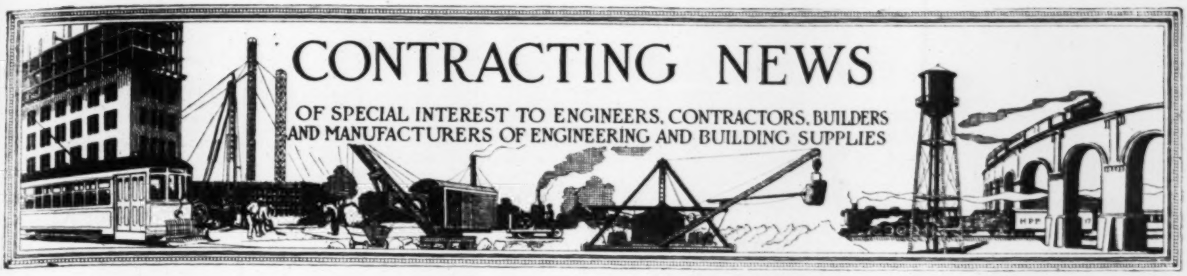
Concrete Bridge

Hampton, N. Y.

Bids will be received by the undersigned until two o'clock P.M., August 17th, at the Town Hall in Hampton, N. Y., for the construction of a steel reinforced-concrete arch bridge across the Poultney River at Leonard's. Plans and specifications can be obtained at the Allen Bank in Fair Haven, Vt., or at the town clerk's office. Hampton, N. Y. The right to reject any or all bids is reserved.

E. S. DOUGLASS,
Supt. Highways, Hampton, N. Y.
SELECTMEN, Fair Haven, Vt.

SEALED PROPOSALS will be opened by the Lighthouse Inspector, Buffalo, N. Y., at 2 o'clock p.m., August 20, 1917, for furnishing metal work for one steel tower. Information upon application to the above office.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 52 to 56 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Aug. 25.	Girard, O.	Aug. 23
Aug. 27.	Ottawa, Ont.	Aug. 16
Aug. 27.	Otis, Colo.	Aug. 23
Aug. 29.	Monett, Mo.	Aug. 23
Aug. 30.	Cleveland, O.	Aug. 23
Aug. 30.	Ogilvie, Minn.	Aug. 23
Sept. 3.	Burlingame, Kan.	Aug. 16
Sept. 4.	Hamilton, Ont.	Aug. 16
Sept. 4.	Cumberland, Md. Adv. Aug. 9 to 23.	Aug. 9
Sept. 6.	Wolverton, Minn.	Aug. 23
Sept. 6.	Brockton, Mass. Adv. Aug. 16.	Aug. 16
Sept. 6.	Thomson, Ill. Adv. Aug. 16.	Aug. 16
Sept. 10.	Cumberland, Md. Adv. Aug. 16 and 23.	Aug. 16
Sept. 11.	New York, N. Y. Adv. July 12 to Aug. 23.	July 12
Sept. 12.	Kansas City, Mo.	Aug. 23

SEWERS

Bids Close		See Eng. News-Record
Aug. 28.	Oberlin, O.	Aug. 23
Aug. 28.	Newark, N. J.	Aug. 23
Aug. 28.	New York	Aug. 23
Aug. 29.	Long Island City, N. Y.	Aug. 23
Aug. 30.	Mora, Minn.	Aug. 16
Sept. 4.	Cumberland, Md. Adv. Aug. 9 to 23.	Aug. 9
Sept. 4.	Rocky River, O.	Aug. 23
Sept. 4.	Dodge Center, Minn.	Aug. 23
Sept. 6.	Cleveland Heights, O.	Aug. 23
Sept. 15.	Hillsboro, Ill.	Aug. 16

BRIDGES

Bids Close		See Eng. News-Record
Aug. 25.	Martinsburg, W. Va.	Aug. 9
Aug. 27.	Elberton, Ga.	Aug. 2
Aug. 27.	Camden, S. C.	Aug. 23
Aug. 27.	Indianapolis, Ind.	Aug. 23
Aug. 27.	Reading, Pa.	Aug. 23
Aug. 28.	Pawnee, Okla.	Aug. 23
Aug. 28.	Hohenwald, Tenn.	Aug. 16
Aug. 28.	Rockville, Ind. Adv. Aug. 16.	Aug. 16
Aug. 28.	Channahon, Ill. Adv. Aug. 16 and 23.	Aug. 16
Aug. 28.	St. Louis, Mo.	Aug. 23
Aug. 29.	Columbus, O. Adv. Aug. 16 and 23.	Aug. 16
Aug. 30.	Kankakee, Ill.	Aug. 2
Sept. 1.	Annapolis, Md.	Aug. 16
Sept. 1.	New Martinsburg, W. Va.	Aug. 16
Sept. 3.	Sullivan, Ind.	Aug. 23
Sept. 4.	Brazil, Ind.	Aug. 23
Sept. 4.	Montgomery, Pa. Adv. Aug. 16 and 23.	Aug. 23
Sept. 4.	Williamsport, Pa. Adv. Aug. 16 and 23.	Aug. 16
Sept. 4.	Olympia, Wash.	Aug. 23
Sept. 6.	Hiawatha, Kan.	Aug. 23
Sept. 6.	Duluth, Minn.	Aug. 23
Sept. 10.	Omaha, Neb.	Aug. 23
Sept. 10.	Akron, O.	Aug. 23
Sept. 11.	Bradentown, Fla.	Aug. 16

STREETS AND ROADS

Bids Close		See Eng.* News-Record
Aug. 24.	Pennsylvania	Aug. 9
Aug. 24.	Uniontown, Pa.	Aug. 9
Aug. 24.	Lancaster, O.	Aug. 16
Aug. 25.	Indiana	Aug. 16
Aug. 25.	Morrison, Ill.	Aug. 23
Aug. 27.	California	Aug. 16
Aug. 27.	Indiana	Aug. 16
Aug. 27.	Newark, N. J.	Aug. 2
Aug. 27.	Portland, Me.	Aug. 9
Aug. 27.	New Brunswick, N. J.	Aug. 16
Aug. 27.	Elizabeth, N. J.	Aug. 16
Aug. 27.	Little Falls, N. J.	Aug. 16
Aug. 27.	Los Angeles, Cal.	Aug. 16
Aug. 27.	St. Paul, Minn.	Aug. 16
Aug. 27.	Tecumseh, Okla.	Aug. 23
Aug. 27.	Vancouver, Wash.	Aug. 23
Aug. 27.	East Dubuque, Ill.	Aug. 23
Aug. 28.	Weehawken, N. J.	Aug. 23
Aug. 28.	Farmville, Va.	Aug. 16
Aug. 28.	Massachusetts	Aug. 23
Aug. 29.	Springfield, Ill.	Aug. 23
Aug. 29.	Cleveland, O.	Aug. 23
Aug. 29.	Newark, N. J.	Aug. 23
Aug. 29.	Bridgeton, N. J.	Aug. 23
Aug. 30.	New Brunswick, N. J.	Aug. 16
Aug. 30.	Oklahoma, Okla.	Aug. 9
Aug. 30.	Indiana	Aug. 16
Aug. 30.	Kingsport, Tenn.	Aug. 16
Aug. 30.	Pennsylvania Adv. Aug. 16.	Aug. 16
Aug. 30.	Louisiana	Aug. 23
Aug. 30.	Santa Barbara, Cal.	Aug. 23
Aug. 30.	Indiana	Aug. 23
Aug. 31.	East Rutherford, N. J. (Rutherford, P. O.)	Aug. 23
Sept. 1.	Greenville, Miss.	Aug. 23
Sept. 1.	Greenfield, Ind.	Aug. 23
Sept. 1.	Scottsboro, Ala.	Aug. 16
Sept. 3.	Greenfield, O.	Aug. 23
Sept. 3.	Indiana	Aug. 23
Sept. 4.	Canton, Ill.	Aug. 23
Sept. 4.	California	Aug. 23
Sept. 4.	Maryland	Aug. 23
Sept. 4.	Indiana	Aug. 23
Sept. 4.	Seattle, Wash.	Aug. 23
Sept. 4.	Pittsburgh, Pa.	Aug. 16
Sept. 4.	Columbus, O.	Aug. 16
Sept. 4.	New Brunswick, N. J.	Aug. 16
Sept. 4.	Yazoo City, Miss.	Aug. 16
Sept. 4.	Pennsylvania Adv. Aug. 16 and 23.	Aug. 23
Sept. 4.	Toms River, N. J.	Aug. 23
Sept. 4.	Linden, N. J.	Aug. 23
Sept. 5.	Freehold, N. J.	Aug. 23
Sept. 5.	Indiana	Aug. 23
Sept. 6.	Indiana	Aug. 23
Sept. 6.	Muscatine, Ia.	Aug. 23
Sept. 7.	Indiana	Aug. 23
Sept. 19.	Seattle, Wash.	Aug. 23
Sept. 18.	Hohenwald, Tenn.	Aug. 23

RAILWAYS

Bids Close		See Eng. News-Record
Aug. 30.	Pennsylvania Adv. Aug. 16.	Aug. 16

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Aug. 27.	Benson, Minn.	Aug. 23
Aug. 28.	Winston-Salem, N. C.	Aug. 16
Aug. 28.	Madison, S. D.	Aug. 23
Aug. 30.	Calhoun, Ky.	Aug. 23
Aug. 30.	Detroit, Minn.	Aug. 16
Aug. 30.	Tallahassee, Fla.	Aug. 16
Aug. 31.	Willmar, Minn.	Aug. 23
Oct. 2.	St. Cloud, Minn.	Aug. 2
Sept. 6.	Thomson, Ill. Adv. Aug. 16 and 23.	Aug. 23
Sept. 8.	Madison, Minn.	Aug. 23
Sept. 12.	New Orleans, La.	Aug. 23

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Aug. 31.	Seattle, Wash.	Aug. 16
Sept. 4.	Columbus, O.	Aug. 16

BUILDINGS

Bids Close		See Eng. News-Record
Aug. 28.	Detroit, Mich.	Aug. 2
Aug. 28.	Dike, Ia.	Aug. 16
Aug. 28.	Hudson, Wis.	Aug. 16
Aug. 28.	Columbia, S. C.	Aug. 23
Aug. 28.	Faribault, Minn.	Aug. 23
Aug. 31.	Rochester, N. Y.	Aug. 23
Aug. 30.	Conde, S. D.	Aug. 16
Aug. 30.	Columbus, O.	Aug. 16
Aug. 30.	London, O.	Aug. 16
Sept. 1.	Lincoln, Neb.	Aug. 16
Sept. 1.	Elmira, N. Y.	Aug. 9
Sept. 1.	Milwaukee, Wis.	Aug. 9
Sept. 4.	Lakewood, O.	Aug. 16
Sept. 4.	Detroit, Mich.	Aug. 23
Sept. 4.	Columbus, O.	Aug. 23
Sept. 5.	Englewood, N. J.	Aug. 23
Sept. 5.	Kent, O.	Aug. 23
Sept. 5.	Newton, Ia.	Aug. 16
Sept. 5.	Brooklyn, N. Y.	Aug. 16
Sept. 7.	Albany, N. Y. Adv. Aug. 16 and 23.	Aug. 23
Sept. 15.	Oklahoma, Okla.	Aug. 16
Sept. 15.	Spirit Lake, Ia.	Aug. 9

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Aug. 25.	Charleston, S. C.	Aug. 9
Aug. 27.	Hingham, Mass.	Aug. 9
Aug. 27.	Washington, D. C.	Aug. 9
Aug. 27.	Philadelphia, Pa.	Aug. 16
Aug. 27.	Detroit, Mich.	Aug. 23
Aug. 27.	Norfolk, Va.	Aug. 23
Aug. 27.	Washington, D. C.	Aug. 23
Aug. 28.	Mare Island, Cal.	Aug. 23
Aug. 28.	Detroit, Mich.	Aug. 2
Aug. 29.	Glenwood Springs, Colo.	Aug. 9
Aug. 30.	Franklin, Pa. Adv. July 26 and Aug. 2.	July 26
Aug. 31.	San Pedro, Cal.	Aug. 16
Sept. 3.	Kuahua, T. H.	Aug. 9
Sept. 4.	McKees Rock, Pa.	Aug. 9
Sept. 4.	Detroit, Mich. Adv. Aug. 9 to 23.	Aug. 9
Sept. 5.	Torrington, Wyo. Adv. July 26.	July 26
Sept. 5.	Washington, Ga.	Aug. 2
Sept. 5.	San Francisco, Cal. Adv. Aug. 9 to 23.	Aug. 9
Sept. 5.	Washington, D. C. Adv. Aug. 16.	Aug. 16
Sept. 6.	Forsyth, Ga.	Aug. 2
Sept. 12.	Raton, N. M.	Aug. 23
Sept. 12.	Long Island City, N. Y.	Aug. 9
Sept. 21.	Kendallville, Ind. Adv. Aug. 16 and 23.	Aug. 16

MISCELLANEOUS

Bids Close		See Eng. News-Record
Sept. 4.	Levee Work—New Orleans, La.	Aug. 23
Sept. 4.	Dam—San Diego, Cal.	Aug. 23
Sept. 5.	Shaft—New York, N. Y.	Aug. 23
Sept. 6.	Pumping Machinery—Brockton, Mass.	Aug. 23

Where name of official is not given, inquiries should be addressed to City Clerk County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. J., New Brunswick—City plans to install 4200 water meters. About $40,000. Address E. E. Farrington, mayor.

Water-Works (Continued)

Pa., Ambridge—Boro. Council passed ordinance Aug. 6, for securing land to improve and enlarge waterworks, Ambridge boro. L. C. Beall, pres.

Pa., Lewiston — Lewiston-Reedsville Water Co. plans to develop additional source of water supply from Lingle Run, and to treat the same. S. W. Cooper, city supt.

Pa., Meshoppen—City plans to improve waterworks system. A. H. Sterling, city supt.

Pa., Mt. Joy—Boro. election soon to vote on $30,000 bond issue to build filtration plant and improve water-works system. R. Fellenbaum, clk.

Pa., Pottsville—Silver Creek Water Co. plans to extend distributing system, Blythe Twp., Schuylkill Co. W. D. Pollard, gen. mgr.

Md., Takoma Park—Maryland State Bd. Health plans to build hypochlorite plant here.

N. C., Belmont—See "Sewers."

Ga., Tallulah—See "Industrial Works."

O., Cuyahoga Falls—City to sell $25,000 bonds to improve water-works system. L. F. Cook, city supt.

O., Dayton—(Official)—City to sell $380,000 bonds, Sept. 20, to extend water-works system. H. Collins, city supt.

Neb., Pawnee—City sold $10,000 bonds to build water-works extension. T. H. Lawrie, city supt.

Mont., Geraldine—City plans to purchase and improve Winchell Spring Water Co. plant and lease Rattlesnake Springs. About $15,000, exclusive of improvements.

Tex., Mineral Wells—City lets contract about Oct. 1, building spillway filters, pipe line, and dam for water-works system.

Tex., Throckmorton—City having plans prepared by E. Elrod, engr., Interurban Bldg., Dallas, building water-works system.

Okla., Coyle—Council passed ordinance authorizing $13,000 bond issue to improve waterworks system.

Okla., Cushing—City having plans prepared improving water-works system, including dam and wells.

Okla., Dewar — City election voted on $20,000 bond issue for waterworks.

Okla., Lawton—City plans to extend waterworks system. About $375,000. Bonds voted J. M. Haynes, secy. bd. comrs. W. W. Soper, city supt.

Okla., Miami—City having plans prepared improving waterworks system. A. L. Saylars, city supt.

Okla., Oklahoma—City plans to spend $10,000 to connect city water mains with 5 privately owned wells. J. W. Bennett, supt.

Okla., Okmulgee — (Official) — City defeated bonds to build water-works system. R. H. Jenness, comr. finance. Noted July 5.

Okla., Poteau—City soon lets contract, waterworks extension, involving 500,000-gal. reservoir, standpipe, filtration plant and laying 10-in. main. About $71,000. C. M. Bagwell, mayor.

Okla., Ryan—City voted $16,000 bonds to extend water-works system.

Okla., Shamrock—City voted $40,000 bonds to build water-works system. Noted Aug. 2.

Okla., Woodward—City election Sept. 1 to vote on $42,000 bond issue to improve waterworks, electric light and sewerage systems. F. H. Kilburn, city supt.

Idaho, Idaho Falls—Council passed ordinance to issue $82,500 bonds to improve water-works system light and pave street intersections.

Utah, Vernal—City sold $35,000 bonds to build water-works system. F. Hatch, supt.

Que., Levis—City council authorized $28,066 bond issue to build water-works and drainage system in Villemay Ward. L. Lemieux, clk. F. Desbrothers, supt.

BIDS DESIRED

N. J., Little Falls—(Official)—Until Aug. 27, by City, building pumping station. B. A. Stanley, supt. H. J. Harder, 140 Market St., Paterson, engr.

O., Cleveland—(Official)—Until Aug. 30, by City, building foundation 30,000,000 gal. De Laval centrifugal pump, auxiliaries, etc., and building structural steel platform around same, at Division Ave. pumping station. R. Hoffman, city engr. C. F. Schwartz, city supt.

Minn., Ogilvie—(Official)—Until Aug. 30, by Village, building water-works and sanitary sewerage system, including 8150-ft. of from 8- to 15-in. vitr. sewer tile 4- to 19-ft. deep together with sewage disposal plant, sludge bed and 2400-ft. of from 6- to 8-in. c.i. B & S water pipe, steel tower, tank, etc., optional bids wood stave pipe and compressed air system. J. F. Druar, 314 Commercial Bldg., St. Paul. Noted July 12.

Minn., Wolverton—Until Sept. 6, by H. C. Ellis, city clk., building water-works and sewerage systems.

Mo., Kansas City—Until Sept. 12, by W. C. Weaver, purch. agt., building 20,000,000-gal. centrifugal pump. B. Lowther, ch. engr. Noted Apr. 19.

Mo., Monett—(Official)—Until Aug. 29, by J. Johnson, city clk. building 1,000,000-gal. rein.-con. reservoir. Noted Aug. 9.

Colo., Otis—Until Aug. 27, by Town Clk., building water-works system, including deep well, wrought-iron water pipe, castings, tees, elevated tank and tower, 25,000-gal., etc. R. D. Salisbury, 1415 East Colfax Ave., Denver, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Hartford—Bd. Water Comrs. let contract laying c.i. water pipe in city proper to F. B. & W. H. O'Neil 324 Maple Ave., and A. C. Sternberg, Park and Mountain Rd., $30,186; laying mains in Wast Hartford, $220,765. Noted May 3.

★Ga., Savannah—See "Sewers."

★Wis., Portage—City let contract waterworks system, including reservoir, 460,000 gal. pumping station, piping filtration plant to Cast Stone Constr. Co., Eau Claire, $80,000. Noted June 7.

★Kan., La Crosse — City let contract water-works improvement including laying of pipe to Connor Constr. Co., Kansas City, Mo. Noted June 28.

★Kan., Oswatomie — City let contract water-works improvements, including 130-hp. boiler, 200 k.v.a. unit pumps to Merkle Heins Machinery Co., 508 Interstate Bldg., Kansas City, Mo., $21,100.

★N. D., Goodrich—Village let contract steel tower and water mains to Robinson & Ward, Grand Forks, $25,000. Noted Aug. 9.

★Okla., Ada.—City let contract 500,000 gal. tank to Chicago Bridge & Iron Wks., 37 West Van Buren St., Chicago, $34,000; rein.-con. flume to Independent Concrete Pipe Co., 1201 State Life Bldg., Indianapolis, $24,200. Noted July 26.

★Cal., Menlo Park—City let contract furnishing wood-stave pipe for Camp Fremont to Redwood Mfg. Co., Hobart Bldg., San Francisco, $10,000.

SEWERS

Proposed Work

N. Y., Rochester—See "Streets and Roads."

N. Y., Syracuse—City rejected bids building sewers in Grand Ave. and South Salino St. H. C. Allen, city engr. Noted Apr. 12.

N. J., Asbury Park—City Comn. plans to rebuild sewerage system. About $19,000. H. B. White, clk. R. Bartley, Jr., city supt.

N. J., Bayonne—Bd. Comrs. plans to build sewers in East 23rd St. W. Clarkson, city engr.

N. J., Fanwood—City deferred plans to build sewerage system because of high cost of material and scarcity of labor. Noted May 17.

N. J., Newark—Bd. St. & Water Comrs. plans to build sewer portions Sandford Ave. and Mountain View Pl. M. R. Sherrard, city engr.

N. J., North Arlington—(Arlington P. O.)—State Bd. Health approved plans to build sewers in eastern section boro. T. F. Bowe, Rutherford, engr.

N. J., North Bergen—Twp. Com. soo lets contract sewerage system and sewag disposal plant. R. Gaw, engr.

N. J., Pleasantville—City Council plan installing sewer system. About $150,00 Address City Clk.

N. J., Trenton—City plans to build sewe in North Walter Ave. and Lombard an Cromwell alleys. A. G. Howell, clk.

N. J., Washington—Town plans enlarg ing sewage disposal plant including additional septic tanks and enlarging sludg beds. About $12,000. Clyde Potts, 3 Church St., New York City, engr.

Pa., Allentown—City had plans prepared building sewerage system and sewage disposal plant. About $2,000,000. W. H. Innis, Phila., supt. constr. C. D. Weisbach, city engr. Noted May 3.

Pa., Brookville—City had plans prepared building sanitary sewerage system.

Pa., Corapolis—State Health Dept. approved plans building sanitary sewerage system and sewage disposal treatment plant. Edeburn, Cooper & Co., city engrs.

Pa., Fayette City—City having plans prepared building sanitary sewer extensions and sewage treatment plant.

Pa., Johnstown—State Health Dept. approved plans main, intercepting and lateral sewers and sewage treatment plant. J. R. Crassey, city engr.

Pa., Latrobe—City plans to build sewage disposal plant and extend sanitary sewage system. D. Jones, city engr.

Pa., Lower Providence—Eagleville Sanatorium for Consumptives plans to build sewerage system and sewage treatment works at institution.

Pa., Norristown — Allan Wood, Iron & Steel Co., plans to build sewerage system and sewage treatment plant, Ivy Rock plant, Plymouth Twp., Montgomery Co.

Pa., Phila. — Council passed ordinance building Rock Run Main Sewer, portions Old York Rd., 15th St., 66th Ave., 18th St. and 67th Ave., North; building relief sewer 29th St. Wingohocking sewer and Wissahickton high level intercepting sewer. C. Albright, city engr.

N. C., Belmont—Town issued $20,000 bonds to build sewerage system; also plans to build water-works system.

N. C., Southport—City plans to build sewerage system. About $12,000.

O., Akron—Council passed ordinance for improving portion Brookside St., including grading, curbing, building sidewalks, sewer laterals and water service connections. S. J. Cole, city clk.

O., Celina—(Official)—Village to sell $14,000 bonds, Sept. 12, to build East Side storm sewer. J. M. Wimter, village clk.

O., Cincinnati—Council passed ordinance to issue $920,000 bonds to build Milcreek trunk sewer and sewers in Madison, Westwood, Clifton, Avondale and other districts. F. Krug, city engr.

Mich., Bessemer—City election, Aug. 27, to vote on $50,000 bond issue to build sewers.

Mich., Menominee — City rejected bid, storm sewer. T. R. Hasley, city engr. Noted June 28.

Wis., Fond du Lac—City plans to build sanitary sewer, portions McWilliams, East Scott, Brooke, Griffith and Ruggles Sts. J. S. McCullough, city engr.

Wis., Milwaukee—Sewerage Comn. soon lets contract building power plant and activated sludge sewage disposal plant on Jones Island. About $800,000. J. H. Fowles, secy.

Ia., Marshalltown—City plans to build sanitary sewerage system. W. H. Steiner, city engr.

Minn., Caledonia — City rejected bids building 18,000 ft., 8- to 18-in. sewer, and sewage disposal plant. Noted July 26.

Kan., Wichita—City plans to build sanitary sewer No. 20, 5-mi. long from northern to southern end of city. About $250,000. B. C. Wells, city engr.

Neb., Oakland—City election Aug. 28 to vote on $35,000 bond issue to build sewerage system. R. Johnson, city clk.

Sewers (Continued)

Neb., Omaha—City Comrs. passed ordinance, $20,000 bond issue, for sewers. J. A. Bruce, city engr.

Neb., Ponca—City having plans prepared by C. Morriarity, engr., 600 United Bank Bldg., Sioux City, Ia., building sanitary sewerage system, including 2- or 3-mi. clay or concrete pipe, 8- to 12-in. H. H. Hart, mayor.

Mont., Bridger—City election soon to vote on bond issue to build sewerage system.

Mo., Springfield — See "Streets and Roads."

Ark., Dardanelle—Comrs. Sewer Dist. No. 1 rejected bids 7½ mi. vitr. pipe sewer 6- to 30-in. diam. Noted July 26.

Okla., Woodward—See "Waterworks."

Cal., Los Angeles—City election, Sept. 5, to vote on $150,000 bond issue to build sewers in Dist. No. 6. A. C. Hansen, city engr.

Cal., San Diego—(Official)—City soon lets contract storm drain in portion 6th St., about $21,292; paving, building sidewalk and curb on portion National Ave., about $37,013. Noted July 26.

Ont., Burlington—City having plans prepared new sewers, by P. Dawson, engr. About $50,000.

Ont., Parry Sound—City had plans prepared sewerage system.

Ont., St. Catharines—City plans to build sewer in portions Frazer St. W. P. Near, city engr.

B. C., South Vancouver—Joint Sewerage Bd. plans building sewer, 1 mi. Manitoba St.

BIDS DESIRED

N. Y., Long Island City—Until Aug. 29, by M. M. Connolly, boro. pres., for sewers and appurtenances in portions of Anthon, Buchman, Fillmore and Junction Aves., Sackett, Glasser and Chicago Sts., 2nd Ward; Forbes St., 3rd Ward; Guion, Woodhaven, Metropolitan and Myrtle Aves. and North Villa and North Wickes Sts. and Fulton Pl., 4th Ward.

N. Y., New York—(Official)—Until Aug. 28, by M. M. Marks, boro. pres., improving and extending sewer in portions of 91st St., building receiving basins on 5th Ave., northwest corner 29th St., and alterations and improvements to basins with inlets northwest corner 27th St. and 4 other points; southwest corner 44th St., northwest corner 162nd St. and Ft. Washington Ave., and northeast corner Bway. and 121st St.

N. J., Newark—Until Aug. 28, by Passaic Valley Sewerage Comn., Essex Bldg., building superstructure Bayonne Shaft, part Sect. No. 3, including timber fence and wrought iron piping, c.i. filled plates etc.

O., Cleveland Heights—Warrensville P. O.)—Until Sept. 6, by Town, building sewers and water curbs connections in 15 streets. F. A. Pease Eng. Co., 804 Marshall Bldg., Cleveland, engrs.

O., Girard—(Official)—Until Aug. 25 by H. E. Rees, village clk., building sewers and house connections in part Sewer Dist. No. 1 portions Olive St. Sewer Dist. No. 3, extension Maple Ave. W. Wilson, Youngstown, village engr.

O., Mingo Junction — (Official) — Until Sept. 1, by G. E. Fithen, village clk., building sewers in Clifton and McListee Aves. and grading Garfield Ave.

O., Oberlin—(Official)—Until Aug. 28, by W. A. Hart, village clk., building storm sewers in Dists. Nos. 1, 2, 4, 5, 6, 7 and 3.

O., Rocky River—(Official)—Until Sept. 4, by F. Mitchell, city clk., constructing sewers, sewage disposal plant, flushing tunnels, etc. E. Hamold, city engr. Noted Aug. 9.

Minn., Dodge Center — (Official) — Until Sept. 4, by village, building sanitary sewerage system, including 23,000-ft. 8 to 18 in. sewer tile together with sewage disposal plant. J. F. Druar, 314 Commercial Bldg., St. Paul, const. engr. Noted Aug. 16.

Minn., Ogilvie—See "Water-Works."

Minn., Wolverton—See "Water-Works."

Cal., Santa Barbara—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., New Haven—City let contract building sewerage system, Prospect Beach Sect. to Acme Eng. Co., Hartford, $80,000.

★N. Y., Syracuse—City let contract Sect. B, 17th Ward sewer to T. C. Hookway Constr. Co., 106 Barnstable Blk., $11,800.

★Pa., Phila.—City let contract building Northeast sewage disposal plant, Wheatsheaf Lane, east of Richmond St. to Phila. Subway Constr. Co., $919,070.

★Md., Hagerstown—Sewerage Comn. let contract building main and lateral sewers, 22,500 lin.ft., 2000 ft. sanitary sewers, 8-, 27-in. diam. together with manholes and appurtenances to H. C. Brooks Constr. Co., Martinsburg, W. Va. Noted July 12.

★Ga., Savannah—(Official)—Port Wentworth Terminal Corp., 6 Bway. New York City, let contract sewers, roads, waterworks, and cottages to Terry & Tench, Grand Central Terminal, New York City, $600,000. Noted Aug. 16.

★Tenn., Maryville — City let contract building 12 mi. sanitary sewers, 8- to 15-in. to J. R. Sutherlin Constr. Co., 819 Commerce Bldg., Kansas City, Mo. $70,000 bond issue authorized. Noted May 24.

★O., Cleveland—Bd. Control let contract installing sewer in portion of Euclid Ave. to D. Zullo, 10501 Hudson Ave., $16,543.

O., Lebanon—(Official)—Village received low bids building auxiliary sanitary sewerage system, from W. H. Boyd, 123 Grafton Ave., Dayton, and C. H. Martin, Middletown. Noted July 26.

★O., Piqua—(Official)—City let contract building Northwest storm sewer to Shamron & Ziegler, Piqua. Noted Aug. 2.

Mich., Menominee—City received low bid building 6000 lin.ft. sewer, from Carlin & Magnus, Marienette, $16,600.

★Ia., Merrill—City let contract building sewerage system to Moore-Seig Constr. Co., Waterloo, $14,632.

★Ia., Sioux City—City let contract laying sanitary sewer from 34th and Jones St. to 24th and Geneva Sts. to W. B. Carter, Sioux City, $12,000.

★Minn., Atwater—City let contract sewerage system including 21,000 ft. of from 8- to 15-in. sewer pipe to E. T. Webster, St. Paul, $29,866. Noted July 12.

★Neb., Norfolk—City let contract sewer extension to G. Vlasnik, 624 North 32nd St., Lincoln.

★Mont., Butte—See "Streets and Roads."

★Tex., Dallas—Sewerage Comn. let contract sewage disposal plant to Cabell M. Kelly, Dallas. About $30,000. Noted May 17.

★Tex., San Antonio—City let contract sewage pumping plant, Sherman St., to be used in connection with Camp Kelly to McKenzie Constr. Co., San Antonio. About $30,000. Noted Aug. 9.

★Ariz., Douglas—City let contract sewerage system to M. F. Dicus, Douglas, $46,000. Noted June 7.

Wash., Seattle—(Official)—City lets contract about Nov. 15th for sewers in 43rd Ave., N. E. About $15,835. A. H. Dimock, city engr. Noted Aug. 9.

★N. S., Halifax—City let contract sewer extensions to Cook Constr. Co., 335 Queenpool St., $145,000. Noted Aug. 16.

★N. S., New Waterford—See "Streets and Roads."

BRIDGES

Proposed Work

Conn., Waterbury—City rejected bids rein.-con. bridge over Naugatuck River on West Main St. About $75,000. R. A. Cairns, city engr. Noted Aug. 9.

Wis., Prairie Du Chien—Prairie Du Chien & Wyalusing Bridge Co., soon lets contract building 700 ft. rein.-con. toll bridge over Wisconsin River. About $50,000. J. H. Brantz, St. Paul and Manakota, Minn., engr. Noted July 12.

Kan., Junction City — See "Streets and Roads."

Mo., Benton—See "Streets and Roads."

Mo., Platte City — See "Streets and Roads."

Mo., St. Louis—City election Nov. 6 to vote on $500,000 bonds to build approach to free bridges; also $500,000 to build bridges, viaducts and streets. M. R. Witter, clk.

Okla., Claremore—Rodgers Co. Comrs. plan to build bridges as follows: Over Verdigris River, north of Sageeyah, cost, $20,000; over Dog Creek, northeast Claremore, $1200; over Spencer Creek, Chelsea Twp., $1200.

Okla., Enid—Garfield Co. plans building 30 new bridges and culverts. About $60,000.

Wash., Spokane—A. R. Scott, Spokane Co. engr., preparing plans for steel bridge over Spokane River, near Greenacres. About $25,000. Noted Apr. 19.

Cal., Porterville—City plans election to vote on $30,000 bonds to build bridges over Porter slough.

Cal., Woodland—Bd. Supervs. Yolo Co. plan to build bridges at Madison and Yolo. About $70,000.

BIDS DESIRED

Pa., Montgomery—(Official)—Until Sept. 4, by Comrs. Lycoming Co., rein.-con. bridge over west branch Susquehanna River on 2nd St.; advertised in this issue.

Pa., Reading—(Offiical)—Until Aug. 27, by W. H. Dechant & Sons, engrs., Baer Bldg., building bridge over Schuylkill River for Carpenter Steel Co. Noted Aug. 9.

Pa., Williamsport—Until Sept. 4, by Lycoming Co. Comrs. building bridges on Newberry-Duboistown and Montgomery Rds. About $400,000. M. C. Krouse, engr. Noted Apr. 19.

S. C., Camden—Until Aug. 27, by Kershaw Co. building bridge over Wateree River. Frink & Pinner, Norfolk, engr.

O., Akron—(Official)—Until Sept. 10 by Summit Co. Comrs. building North Hill Viaduct, rein.-con., advertised in this issue. Specifications on file at this office.

Ind., Brazil—Until Sept. 4, by Bd. Comrs. Clay Co., building Carter and Wolfe Bridges.

Ind., Indianapolis—(Official)—Until Aug. 27, by Bd. Pub. Wks., for steel girder bridge across canal on 14th St. J. A. Rink, pres. B. J. T. Jeup, city engr.

Ind., Sullivan—Until Sept. 3, Bd. Comrs. Sullivan Co., building F. M. Nead bridge, rein.-con., in Jackson Twp., Lane bridge, rein.-con., in Jefferson Twp.

Minn., Duluth—Until Sept. 6, by St. Louis Co., for rein.-con. bridge over Amity Creek on East Duluth & Lester River Rd. O. Halden, co. aud.

Kan., Hiawatha—Until Sept. 6, by Brown Co. building 4 rein.-con. bridges. F. Whitcomb, clk.

Neb., Omaha—Until Sept. 10, by Douglas Co. for constructing and repairing bridges during year. F. Dewey, clk.

Mo., St. Louis—(Official)—Until Aug. 28 by city building rein.-con. bridge over Broadway at Bellerive Park.

Okla., Pawnee—Until Aug. 28, by Pawnee Co. for 8 steel bridges. J. D. Soulsby, clk.

Okla., Tecumseh—See "Streets and Roads."

Wash., Olympia—(Official)—Until Sept. 4, by city building 370-ft., 4 arch rein.con. bridge over Des Chutes River, 28-ft. roadway, 25-ft. walks. About $100,000. Noted Aug. 9.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Hartford—Bd. Contr. & Supply let contract rein.-con. bridge with retaining walls over Park River on Prospect St. to Fred N. Miller, Norwich. About $27,920. Noted Aug. 16.

★N. Y., Buffalo—See "Industrial Works."

★W. Va., Spencer—(Official)—County let contract 4 bridges in Walton Dist., rein.-con., to Luten Bridge Co., York, Pa., $15,000. Noted July 19.

★Fla., Fort Myers—See "Streets and Roads."

★Fla., West Palm Beach—Palm Beach Co. let contract building bridge over St. Lucie River to C. T. Dawkins Constr. Co., Florida Life Bldg., Jacksonville, $63,517. Noted June 21.

★La., Crowley—Arcadia Co. let contract building bridges to Crowley Paving & Constr. Co., Crowley, $135,000.

★Tenn., Mountain City—See "Streets and Roads."

Bridges (Continued)

Ohio, Cleveland—Cuyahoga Co. received low bid bridge work per report No. 4048 from H. N. Henderson, Chagrin Falls, at $58,000.

O., Lima—City received low bids (a) 2 bridges over Ottawa River, (b) addition to arches on Collett St. bridge, from Natl. Concrete Co., 825 Lemcke Bldg., Indianapolis, (a) $29,750 and $27,250, (b) $15,250; G. C. Hardin, Sidney, (a) $32,548 and $30,533, (b) $16,114; Welty Constr. Co., (b) $15,995.

★**Ind., Brazil** — (Official) — Comrs. Clay Co. let contract Brunswick Bridge over Eel River to Natl. Concrete Co., Indianapolis, $34,960. Noted July 12.

★**Ind., Columbus** — City let contract building 150-ft. rein.-con. bridge to Natl. Concrete Co., 825 Lemcke Bldg., Indianapolis, $21,147.

★**Mich., St. Joseph**—Berrien Co. let contract 19 steel bridges across Dowagiac River drain to Frank A. Stryker.

★**Ill., Cadwell**—Drainage—Comrs. Cadwell D.D. let contract for open ditch involving 45,000 cu.yd. excava. to J. McMann, Goshen. Noted July 26.

★**Wis., Superior**—Great Lakes Coal and Dock Co. let contract building new coal handling bridge, involving 350 tons steel to Mead, Morrison Co., Pittsburgh.

★**Ia., Atlantic**—Cass Co. let contract building bridges to G. Henningson, Red Oak, $13,000.

★**Ia., Maquoketa**—Jackson Co. let contract building and repairing rein.-con. bridges to Internation Bridge Co., Evansville and Anderson & Son, Maquoketa, $26,313 and $18,790 respectively. Noted July 26.

★**Ia., Tipton**—(Official)—Cedar Co. let contract building 35 rein.-con. culverts and 1 I-beam bridge to S. R. Johnston, Tipton and R. W. Hogan, Downey, $17,152. Noted Aug. 9.

★**Minn., Thief River Falls**—Pennington Co. let contract bridge over Redlake River at High Landing to Minneapolis Bridge Co., 728 Metropolitan Life Bldg., Minneapolis, $15,800.

★**Minn., Warren** — (Official) — Marshall Co. let contract 4 highway bridges and 2 rein.-con. culverts to Minneapolis Bridge Co., 728 Metropolitan Life Bldg., Minneapolis $12,182. Noted Aug. 9.

★**Neb., Omaha**—Douglas Co. let contract building and repairing 27 bridges to Omaha Structural Iron Works, 420 Bee Bldg., $60,000. Noted May 10.

★**Neb., Tekamah** — (Official) — City let contract rein.-con. highway bridge to Pickus Eng. Constr. Co., 405 Davidson Bldg., Sioux City, Ia., $13,885. Noted Aug. 9.

Ore., Salem—State Highway Comn., let contract for 10 rein.-con. bridges over Beaver Creek, Columbia Co. to L. O. Herrold, 1237 Chemekett, $36,959.

Cal., Fairfield — (Official) — Bd. Superv. Solano Co. received low bids bascule bridge over Sacramento River from Tibbits Pacific Co., 16 California St., Duncanson-Harrelson Co., Chron Bldg., and Healy-Tibbits Co., 9 Main St., all of San Francisco. Noted Aug. 2.

STRUCTURAL STEEL WORK

BIDS DESIRED

Pa., Reading—See "Bridges."
O., Cleveland—See "Waterworks."
Ind., Indianapolis—See "Bridges."
Okla., Pawnee—See "Bridges."
Neb., Omaha—See "Bridges."
Ohio, Cleveland—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Wis., Superior**—See "Bridges."
★**Ind., Brazil**—See "Bridges."
★**Mich., St. Joseph**—See "Bridges."
★**Minn., Thief River Falls**—See "Bridges."
★**Minn., Warren**—See "Bridges."
★**N. D., Goodrich**—See "Waterworks."
Cal., Fairfield—See "Bridges."

REINFORCED CONCRETE

Proposed Work

Conn., Waterbury—See "Bridges."
Wis., Prairie Du Chien—See "Bridges."

BIDS DESIRED

Pa., Montgomery—See "Bridges."
O., Akron—See "Bridges."
Ind., Brazil—See "Bridges."
Ind., Sullivan—See "Bridges."
Minn., Duluth—See "Bridges."
Kan., Hiawatha—See "Bridges."
Mo., Monett—See "Water-Works."
Mo., St. Louis—See "Bridges."
Okla., Tecumseh—See "Streets and Roads."
Wash., Olympia—See "Bridges."
Cal., San Diego—See "Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Conn., Hartford**—See "Bridges."
★**N. Y., Johnson City**—See "Industrial Works."
★**Pa., Allenport**—See "Miscellaneous."
★**W. Va., Spencer**—See "Bridges."
★**Fla., Fort Myers** — See "Streets and Roads."
★**Ind., Columbus**—See "Bridges."
★**Ia., Maquoketa**—See "Bridges."
★**Ia., Tipton**—See "Bridges."
★**Minn., Warren**—See "Bridges."
★**Kan., Great Bend** — Courthouse — See "Buildings."
★**Neb., Tekamah**—See "Bridges."
★**Tex., Houston**—See "Miscellaneous."
★**Okla., Ada**—See "Water-Works."
★**Ore., Salem**—See "Bridges."
★**Ont., Windsor**—See "Industrial Works."

STREETS AND ROADS

Proposed Work

N. Y., Buffalo—(Official)—A. C. Hinkley, clk. bd. supervs. Erie Co., received no bid building co. road No. 22, Glenwood-East Concord Part 1. Noted Aug. 2.

N. Y., Rochester—Council passed reading of first ordinance for local improvements as follows: Court. St. sewer, $3000; Ambrose St., brick pavement, $7600; Cliff St., brick, $3600; Smith St., asphalt resurfacing, $21,700; Driving Park Ave., asphalt resurfacing, $12,000; Penn St., asphalt, $15,000; Canal St., resurfacing, $14,000; portion Mt. Hope Ave., brick, $16,000; portion Chili Ave. from city line to Genosee Park Blvd., $56,000; Chili Ave. from Genosee Park Blvd. to Lincoln Ave., $23,000; Brockton St., asphalt pavement and sewer, $11,000; and Pavilion St., asphalt walks and sewer, $5200. Final ordinance for local improvements were as follows: Weener Park extension pavements, $9000; paving portion Jefferson Ave., $3600; Ravenwood Ave., grading and walks, $900; Custer St., grading and walks, $2300; Penhurst Ave., paving, $32,000.

N. J., Avon—Boro. soon lets contract paving Main St. Address J. Thompson, mayor. Noted Apr. 19.

N. J., Camden—City Council plans paving South 10th, Walnut and Grant Sts., sheet asphalt on concrete foundation. L. E. Farnham, city engr.

N. J., Newark—Bd. St. and Water Comrs. plans paving Bay Ave., granite block, 20 ft. wide; Geneva St., asphalt, 1½-in. surface on 6-in. concrete foundation. A. L. Swain, clk.

Pennsylvania—(Official)—State Highway Dept., Harrisburg, rejected bids road work Foster Twp., McKean Co. Noted Aug. 9.

Pennsylvania—State Highway Comn., Harrisburg, rejected bids opened Aug. 7, road work in East Taylor and Jackson Twps., Cambria Co., Hanover Twp., Lehigh Co., Swartara Twp., Dauphin Co. and Abington Twp., Lackawanna Co. Noted Aug. 16.

Pa., Erie—Erie Co. Comrs. plan building 163 mi. roads. About $4,075,000. Address Co. Clk., Erie. Noted Apr. 12.

Pa., Pittsburgh — (Official) — Council passed ordinance widening portions Perchment St., and Otter Way. R. Swan, city engr.

Va., Lexington—Rockbridge Co., South River Dist., voted $35,000 bonds to improve roads.

Va., Newport News—City sold $100,000 bonds to pave streets and roads. Noted Aug. 2.

W. Va., New Martinsville — Wetzel Co. plans to build 2 roads from Marshall Co. line to Church Dist. line and from Tyler Co. line, Paden City, through Grant Dist. intersecting Harrison Co. road.

S. C., Greenville—Greenville Co. Comrs. appropriated $85,000 bonds to build roads.

Ga., Augusta—City plans paving several streets, permanent pavement. N. Wingfield, city engr.

Fla., Ocala—Road and Bridge Dist., Marion Co., voted $75,000 bond issue, hardening roads and building bridges.

Ala., Athens — City soon lets contract paving various streets. About $125,000.

Miss., Biloxi—City election Sept. 18 to vote on $40,000 bond issue to improve streets. Noted Aug. 16.

Miss., Okolona — Chickasaw Co. Bd. Supervs. plan to issue bonds to improve 3rd Supervs. Dist. W. A. Wilkinson, clk.

Louisiana—State Highway Dept., New Orleans, had plans prepared New Orleans-Hammond military highway. D. Buie, state highway engr.

La., New Orleans—City Council plans paving portions Franklin, Sayeso and Conti Blvds., Salcedo, Brugelles, Madrid and Paris Sts. W. J. Hardee, city engr.

Ky., Hopkinsville—City plans to improve Virginia St. to city limits. C. A. Cundiff, city engr.

O., Ashland—Council passed ordinance to improve portions West Sandusky St. R. H. Conn, city engr.

O., Bryan—City to sell $15,000 bonds Sept. 10 to improve Wilson, High and Union Sts. J. A. Neill, clk. Noted June 21.

O., Canton—Council passed ordinance to pave 4th Ave. W. E. Sarver, city engr.

O., Cincinnati—City passed ordinance to improve portion Central Ave., 3rd, Madison, Barker, Portmouth, Mapleleaf and Fairbanks Sts. also passed resolution to improve portion St. Lawrence, Weekling, Monteith and Bassett Sts. F. Krug, city engr.

O., Port Clinton—Ottawa Co. Comrs. sold $104,000 bonds to build roads. Noted July 12.

Ind., Laporte—Laporte Co. sold $16,000 bonds to build B. G. Nelson Rd., Center Twp.

Mich., Battle Creek—City plans to pave portion Hamblin and Rumely Aves., brick. E. N. Hunt, city engr.

Wis., Appleton—City had plans prepared widening Pearl St. hill and approach through Fox River Paper Co. mills. A. C. Remley, city engr.

Ia., Sioux City — City plans to pave Jones, Jennings, 39th, Douglas, Pierce, Nebraska and other streets, concrete. About $120,000. T. H. Johnson, city engr.

Minn., Wolford—Town to sell $16,000 bonds Aug. 27 to build roads and bridges. G. Bennett, clk.

Kan., Junction City—Geary Co. to spend $27,450 to build roads and $18,400 to build bridges.

Kan., Osborne—Council passed resolution paving 12 blocks. S. P. Crampton, clk.

Neb., Lincoln—City sold $30,670 bonds to pave various streets. A. Dobson, city engr.

N. D., Fargo—City soon lets contract paving portions 3rd Ave., not included in paving job No. 134, and 10th St.

Mont., Helena—City had plans prepared paving 12½ mi. streets. D. J. McLeod, city engr.

Mo., Benton—Benton Co. voted $750,000 bonds to build roads and bridges. Noted July 19.

Mo., Charleston—Mississippi Co. plans to build 50-mi. gravel roads. About $425,000 available. C. E. Swank, engr.

Mo., Jefferson City—City plans paving Harrison and Jackson Sts., vitr. brick. P. C. Hardin, city engr.

Mo., Platte City—Platte Co. election soon to vote on $20,000 bond issue to build roads and bridges in Parkville Special Rd. Dists.

Mo., St. Louis—See "Bridges."

Mo., Springfield—City plans to improve streets, including 2-mi. paving, 5000 ft. sidewalk, 17,200 ft. curbing, and 8 mi. sewers in east, northeast and southeast sections. About $80,000. O. D. Christman, city engr.

Streets and Roads (Continued)

Ark., Forrest City—St. Francis Co. sold $450,000 bonds to build roads, Dists. Nos. 1 and 2. Noted July 26.

Ark., Helena—Phillips Co. plans to build 200 mi. permanent highways.

Ark., Mt. Ida—Montgomery Co. plans to spend $13,176 to improve highways, Rd. Dist. No. 26.

Ark., Union—Town had plans prepared by State Highway Dept., Little Rock, 5 mi. gravel road northwest corner. About $16,854.

Ark., Van Buren—Crawford Co. having plans prepared by Winters M. Dove, engrs., Ft. Smith, building highway from Van Buren to Washington Co. line, 42-mi., forming link in Arkansas, Jefferson highway.

Ark., Walnut Ridge—Lawrence Co., Walnut Ridge, sold $65,000 bonds to pave 13 mi. Egypt Highway and $31,000 for 6 mi. Portia Highway.

Tex., Amarillo—City plans paving 60,000 sq.yd. W. D. Howren, city engr.

Tex., Beaumont—City will spend $54,000 to resurface portions of College, Liberty, Orleans, Austin, Tevis, Park, Pearl, Calder, Laurel, Main, Walnut, Alamo, Bowie, Jefferson, Main, Cypress, Fannin, Forsyth and Ann Sts. C. L. Scherer, city engr.

Tex., Port Lavaca—County voted $75,000 bond issue building roads in Port Lavaca Rd. Dist. Noted July 26.

Tex., Wichita Falls—Wichita Co. making surveys for road improvements. About $750,000. J. B. Crockett, co. engr. Noted June 14.

Okla., Enid—Comrs. Garfield Co. plan improving roads. About $100,000.

Okla., Tishomingo—Johnston Co., Garner Twp., plans to issue $30,000 bonds to improve roads. Address Co. Comrs.

Idaho—State, counties and Government voted $100,000 bonds to commence building road through state from Phoenix, Ariz., to Canadian boundary, North and South Highway.

Idaho, Bonners Ferry—Boundary Co. voted $70,000 bond issue for highway work.

Idaho, Idaho Falls—See "Water-Works."

Oregon—State Highway Comn., Salem, soon receives bids paving 33 mi. highway, including grading and macadamizing 3 mi. from Comstock to northern Douglas Co. line, eliminating Rice Hill Canyon Creek Canyon grading and macadamizing Cow Creek Rd., with coöperation of Federal Government, state and county. About $400,000.

Ore., Myrtle—City rejected bids paving portions 1st St. New bids. Noted Aug. 16.

Ore., Toledo—Lincoln Co. election soon to vote on bond issue to improve 100-mi. highway.

Cal., Crescent City—Del Norte Co. election soon to vote on $200,000 bond issue to improve highway from here to Grant's Pass.

Cal., Dinuba—City preparing plans paving portion Tulare, South 1 and North L Sts. A. Sloan, city engr.

Cal., Los Angeles — City council plans paving and widening portion West 1st St. A. C. Hausen, city engr.

Cal., Riverside—(Official)—Bd. Supervs. Riverside Co., formed Rd. Imp. Dist. No. 2 and plans to build 34 mi. road in Palo Verde Valley. R. W. Waterman, Blythe, engr. in charge.

Cal., San Diego—See "Sewers."

BIDS DESIRED

Massachusetts—Until Aug. 28, by State Highway Comn., Boston, building 4400 ft. state highway in Kingston.

N. J., Bridgeton—Until Aug. 29, by Bd. Freeholders, Cumberland Co., resurfacing gravel of Shiloh Pike, 3.45 mi. E. C. Ott, chn. road comn.

N. J., East Rutherford—(Rutherford P. O.)—Until Aug. 31, by Common Council, paving Park Ave., granite block. W. W. Patrick, boro. clk.

N. J., Freehold—Until Sept. 5, by Bd. Freeholders Monmouth Co., reconstructing Freehold Rd., 1st section, 14,667 sq.yd. paving; building Holmdel Rd., rein.-con. G. D. Cooper, Red Bank, co. engr.

N. J., Linden—Until Sept. 4, by Twp. Com., improving Meacham Ave., Dennis Pl., Price St. and Elizabeth Ave., 8-in. macadam. About 5560 sq.ft. J. L. Bauer, Elizabeth, twp. engr.

N. J., Newark—Until Aug. 29, by City Comn. paving South 16th St., telford. M. R. Sherrard, city engr. Noted July 26.

N. J., Rutherford—Until Aug. 31, by Council, sidewalks, cement and concrete, Orient and Rutherford Aves., paving Washington Ave. and Sylvan St., wood, Edgewood Pl., concrete curb and gutters. F. A. Stedman, boro. clk. R. M. Watson, boro. engr.

N. J., Toms River—Until Sept. 4, by Bd. Freeholders Ocean Co., reconstructing 1 mi. road, 20 ft. wide. H. C. Shinn, Lakewood, co. engr.

N. J., Weehawken—Until Aug. 28, by Town Council, West New York, paving several streets. About $40,000.

Pennsylvania—(Official)—Until Sept. 4, by F. B. Black, state highway comr., Harrisburg, constructing highways in various counties; advertised in this issue.

Maryland—Until Sept. 4, by State Road Comn., Baltimore, paving 2 mi. concrete road in Frederick Co., 2.33 mi. in Allegheny Co., 1.30 mi. on Monroe St and Elgin Ave., sheet asphalt.

Miss., Greenville—Until Sept. 1 by Washington Co. Highway Comn., surfacing 150-mi. roads, gravel. E. W. Wod, chmn. J. S. Allen, ch. engr.

Louisiana—(Official)—Until Aug. 30 by State Highway Dept., New Orleans, building road from Alexandria to Camp Beauregard, bituminous macadam surfacing, 20 ft. wide, gravel shoulders. About $105,000. Contract for clearing, grubbing and grading has been let to F. T. Constant. D. Buie, state highway engr. Noted Aug. 9.

Tenn., Hohenwald — Until Sept. 18, by Lewis Co. Comn., grading 30 mi. roads involving 12,000 cu.yd. excava. C. Grossman, co. engr.

O., Cleveland—Until Aug. 29 by City improving portion Archwood, Hulda, Jefferson, Locke, Marshall, Suaer, East 125, 126, 127, West 87, Wilbur and East 107th Sts., Fairmont Rd. and Fairchild Ave. R. Hoffman, city engr. Noted Aug. 16.

O., Greenfield—Until Sept. 3, by E. M. Conner, village clk., improving South St., including draining, grading and paving, tarvia, bound macadam concrete.

O., Mingo Junction—See "Sewers."

Indiana—By Co. Comrs. for constructing roads as follows: Aug. 30: Winchester, 3 roads, Washington Twp.; 1, White River Twp.; 2 gravel roads, Stoney Creek Twp.; stone road, Washington Twp.; road, Greensfork Twp. C. E. Tillson, aud. Sept. 3: Portland, crushed stone road, Wabash Twp. John Bonifas, aud.; Valparaiso, road Center Twp. C. A. Blachly, aud.; Nashville, gravel road, Hamblin Twp. Omer Morrison, aud.; Rochester, 2 roads, Henry Twp. E. A. Smity, aud. Sept. 4: Corydon, 5 stone roads, Harrison, Nester and Boone Twps., Spencer and Blue River Twps., Webster and Harrison Twps.; S. C. Mauck, aud. Ben Davis, grading and graveling road. J. M. Hillman, trustee. Portland, crushed stone road, Jefferson Twp. J. Bonifas, aud. Rensselaer, 2 stone roads, Carpenter Twp. J. P. Hammond, aud. Bloomfield, 2 macadam roads, Jackson and Stockton Twps. G. E. Kidd, aud. Plymouth, 5 gravel roads, Walnut, Center and Walnut, Tippecanoe, Center and German Twps., respectively. O. H. Weber, aud. Salem, road Pierce Twp., 5365 ft. E. E. Batt, aud. Monticello, road Jackson Twp. A. G. Fisher, aud. Sept. 5: Goshen, gravel road, Osolo Twp. A. R. Bemenderfer, aud. Sept. 6: Logansport, gravel road, Bethlehem Twp. A. P. Flynn, aud. Laporte, 3 roads, Hanna, New Durham and Cass Twps. F. A. Hausheer, aud. Jeffersonville, macadam road, Washington Twp. G. W. Stoner, aud. Sept. 7: Ft. Wayne, 8 macadam roads, Wayne, Perry, Cedar Creek, Springfield and Maumee, Pleasant, Monroe, Madison and Marion Twps. W. Johnson, aud.

Ind., Indianapolis—(Official)—Until Sept. 5, by Bd. Pub. Wks., improving portion 44th, Dawson, South and Market Sts. B. J. T. Jeup, city engr.

Ill., Canton—Until Sept. 4, by City Clk., paving South 4th Ave., concrete. E. F. Matsinger, city engr.

Ill., East Dubuque—(Official)—Until Aug. 27, by City Clk., for rein.-con. pavement, curb and gutter on 1st and Wall Sts. About $10,000. M. Tschirgi & Sons, 713 Amer. Trust Bldg., Cedar Rapids, Ia., engrs. Noted July 26.

Ill., Morrison—(Official)—Until Aug. 25, by V. N. Taggett, supt. highways, Whiteside Co., building 16,046 sq.yd. gravel or gravel and macadam roadway in Albany.

Ia., Muscatine—Until Sept. 6, by H. B. Caple, city recdr., grading Fuller St., and excavating 747 cu.yd. in alley between 11th and 12th Sts., 900 ft. haul. C. H. Young, city engr.

Kan., Columbus—(Official)—Until Sept. 13, by L. Mobly, chn. bd. comrs. Cherokee Co., grading, graveling, and building Blake Rd. C. M. Cooper, co. engr. Noted Aug. 9.

Okla., Tecumseh—(Official)—Until Aug. 27, by Pottawatomie Co. Comrs. building 10 mi. graded road. About $17,200; 11 concrete culverts and bridges. About $8250. 1 concrete bow string arch and apparatus. About $11,500. L. L. Wimans, co. engr.

Wash., Seattle—Until Sept. 4, by King Co. Comrs., building Auburn-Enumclaw Sect. No. 2, Permanent Highway No. 11C, brick or concrete. About $40,000. S. J. Humes, co. engr. Noted Aug. 16.

Wash., Seattle—Until Sept. 10, by King Co. Comrs., grading and graveling between Renton and Renton Junction, 1 mi., involving removal 9000 cu.yd. material. S. J. Humes, co. engr.

Wash., Vancouver — Until Aug. 27, by Clarke Co. Comrs., 2-mi. permanent highway No. 1-A. About $27,000.

California—Until Sept. 4, by State Highway Comn., Sacramento, grading 10.8 mi. in Shasta Co. and 4.5 mi. in San Diego Co.

Cal., Santa Barbara—Until Aug. 30, by A. C. Hall, city clk., paving De La Vina St., 4-in. concrete base, 2-in. asphalt surface, cement, curbs, gutters, vitr. pipe and sewers, also paving Deer St., Troy and Remington Pl., Breckenridge St. and Wohlers Ave. A. B. Cook, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Vt., Barre**—(Official)—City let contract paving portion South Main St. to J. C. De Brune, Barre, $13,135. Noted July 26.

★**Massachusetts**—State Highway Comn., Boston, let contract building highways in following towns: Lynn, granite block, concrete foundation to J. H. Fannon, 26 Hinckley St., Sommerville, $35,251; Swansea to J. McCormack, 315 Taunton Ave., East Providence, R. I., $7632; Freetown, E. J. Rourke, 2280 Massachusetts Ave., Cambridge, $18,215. Noted Aug. 9.

Massachusetts — State Highway Comn., Boston, received low bids building roads in West Springfield, from Adams & Ruxton Contg. Co., 33 Lyman St., $16,812; L. C. Fay & Co., Main St., $17,946; Cordner & Montague, Bay St., $21,597. Contractors all of Springfield. Noted Aug. 9.

★**Mass., Boston**—Bd. Street Comrs. let contract paving portion following streets: Beacon, granite block, Park, to Charles, asphalt; Park from Tremont to Union Club, granite; Tremont and Washington Sts., wood block; Somerset, granite; to B. E. Grant & Co., 27 School St., $75,967. Noted July 19.

★**Mass., Brockton**—City let contract paving Belmont and Main Sts. to Simpson Bros., 166 Devonshire St., Boston, $28,655.

★**Mass., Woburn**—State Highway Comn., Boston, let contract, paving 2400 ft. highway to A. Pollatto, 1117 Crosby St., Lowell. About $14,405. Noted Aug. 9.

★**Rhode Island**—State Bd. Pub. Roads, Providence, let contract paving 1½ mi. state highway on Boston Neck Rd. to John Bristow, Narragansett Pier. About $33,838. Noted Aug. 9.

★**N. Y., New York**—(Official)—Bronx Parkway Comn., let contract paving portion Bronx River Pkway., with Asphalt Block, to Hastings Asphalt Pavement Co., 25 Broad St., New York City. Noted Aug. 16.

N. Y., Yonkers—Bd. Contract & Supply received low bids paving Palmer Rd., Central Ave. to Bronx River, from Warren Bros., 2306 Creston Ave., bitulithic, old macadam base, $20,516; J. Kearns, Jr., 50 Church St., asphalt block, $27,186; J. J. Hart, 256 Bway., asphalt block, $25,213. Bids to be advertised before contract awarded. Contractors all of New York City.

★**N. J., Belleville**—City let contract paving High St. and Hornblower Ave. to Franklin Contr. Co., 52 Vanderbilt Ave., New York City, $11,000 and $6000 respectively; Cortlandt St. to Northern Constr. Co., 665 Broad St., Newark, $6000.

Streets and Roads (Continued)

★N. J., Elizabeth—Bd. Freeholders Union Co. let contract repairing Springfield Ave., New Providence, to Weldon Contg. Co., New Providence, $10,000.

★N. J., Montclair—(Official)—Town let contract paving portion Park St., warrenite, concrete curb; Bellevue Ave., warrenite, hillsdale brick to Standard Bitulithic Co., 50 Church St., New York City, $2.86 sq.yd. Noted Aug. 9.

★N. J., New Brunswick—(Official)—Bd. Freeholders let contract paving Main and Ferry Sts., South River, to T. H. Riddle, 102 Church St., $40,576. Noted July 26.

★N. J., Orange—(Official)—City let contract paving portion Berkely Ave. into asphalt blocks, to Hastings Pavement Co., 25 Broad St., New York City, $32,525. Noted Aug. 16.

★N. J., Palmyra—(Official)—Township Comn. let contract paving Broad St., concrete, to A. Martinet, Atlantic City. Noted Aug. 16.

★N. J., Paterson—Passaic Co. let contract paving Franklin Ave., from Passaic line to Essex Co. line, through Delawanna St. to F. Spatz, Jr., Nutley, $29,964; Goffle Rd., to Sowerbutt Quarries, Paterson, $51,642; Cedar Grove and Wilmore Rds. Francisco Bros., United Bank Bldg., $24,029. Noted Aug. 9.

★N. J., Weehawken—Town Council West New York let contract paving Bergenline Ave., asphalt block, to George J. Hornung, 413 16th St. About $72,476. Noted May 31.

Pennsylvania—(Official)—F. B. Black, state highway comr., Harrisburg, received low bids road work as follows: (a) Somerset Co., Somerset Twp., 6675 ft. vitr. block, (b) Beaver Co., Big Beaver Twp., 23,546 ft. reinforced cement concrete; (c) McKean Co. Wetmore Twp., 22,101 ft. vitr. brick, (d) Clarion Co., Clarion Twp., 14,128 ft. vitr. brick; (e) Centrer Co., Bellefonte Boro., 2454 ft. vitr. brick; from D. E. Keller, Somerset, (a) $66,012, Mainwaring & Cummins, Inc., Phila., (a) $72,699 (d) $152,798; F. P. Whitton, Pittsburgh, (b) $158,953, P. F. Connolly Co., Realty Bldg., Elmira, N. Y., (b) $144,198; E. N. Love & Son, Corry, (c) $144,974, Larson & Pascuzzi, Kane, (c) $144,249; M. J. Scanlan, New Castle, (d) $103,625; R. B. Taylor, Bellefonte, (e) $28,151. Noted July 26.

★Pennsylvania—(Official)—State Highway Dept., Harrisburg, let contract grading and draining portion State Highway Route 51, Somerset Co., to R. B. Taylor, Bellefonte, $81,428. Noted Aug. 9.

★Pa., Johnstown—City let contract, paving Highland and Larel Aves., Ebbert, Stormer and Hill Alleys to G. T. Morgan, Johnstown.

Pa., Pottstown—City Council received low bid paving portion North and South Centre St., from J. B. Trexler, Reading. About $45,000. Noted July 12.

★Pa., Uniontown—Comrs. Fayette Co. let contract 3 mi. road from Chamberlain-Connellsville Twp. to Pennsville to Bell-Bockel Co., Central Tribune Bldg., Altoona. About $120,000. Noted July 19.

Virginia—State Highway Comn., Natl. Bank of Commerce, Richmond, received low bids paving highway, 18 ft. wide with 6-in. concrete base from Atlantic Bitulithic Co., Virginia Ry. & Power Bldg., $60,000. J. U. Addenbrook's Sons, Norfolk, $40,000.

★W. Va., Ceredo—City let contract paving, to Hunt & Forbes, Ashland, $33,000.

★W. Va., Wheeling—(Official)—Ohio Co. Comrs. let contract grading and building concrete road surface on Steenrod and Mt. de Chantal Rd. to Jacovetty & Savage, Wheeling, $19,927. Noted Aug. 9.

★Ga., Savannah—See "Sewers."

★Ga., West Point—City let contract paving, grading, curbing, draining, building sidewalks various streets to Merrill Road Improv. Co., James Bldg., Chattanooga, $82,000. Noted Aug. 2.

★Fla., Fort Myers—Lee Co. Comrs. let contract 43½ mi. roads, Caloosa Valley Good Rds. Dist., including 89 concrete bridges and culverts, to Trapp & Fraser. About $200,000.

★Miss., Greenwood—Leflore Co. Bd. Supervs. let contract 150-mi. road to W. F. Kelley. $600,000 bond issue voted. Noted July 19.

★Miss., Gulfport—Harrison Co. let contract surfacing 6 mi. highway to Callahan Constr. Co. About $.43 per sq.yd.

Tenn., Chattanooga—Hamilton Co. received one bid building concrete highway Lookout Mountain from Chikamauga Quarry & Constr. Co., James Bldg., $1.90 per yd. concrete and $2.09 per yd. river gravel. Noted Apr. 5.

★Tenn., Mountain City—Johnson Co. Comrs. let contract building 34 mi. road from here to Virginia state line, 34 mi., including 30 bridges and culverts, to Charlotte Paving Co., Charlotte, N. C.

★Ky., Owensboro—Fiscal Court Daviess Co. let contract 19½ mi. Livermore, Henderson, Booneville and Curdsville Rds. to Montgomery, Perkins & Ellis; Hardinsburg Rd. to Miller & Woodruff, both of Owensboro. Noted Aug. 2.

★Ohio—State Highway Comn., Columbus, let contracts building roads as follows: Athens Co., Athens-Hockingport Rd., Wilson & Beckler, Athens, $31,451; Butler Co., Hamilton-Middletown Rd., Strodbeck Bros., Middletown; monolithic brick reinforced concrete; $67.884 and $71,600; Erie Co., Sandusky-Norwalk Rd., John Strauss, Castalia, $24,533; Sandusky-Clyde Rd., John Strauss, Castalia, $29,854; Franklin Co., Columbus-Sandusky Rd.; J. C. McCann & Son, Columbus, bituminous macadam, A-1, $37,243; A-1-C, $38,900; Tar T-1, $36,157; Fayette Co., Hillsboro-Washington Rd., John M. Jones, Washington C. H.; $23,060; Fulton Co., Archbold-Fayette Rd., Gray Bros., Bowling Green, $13,300; Gallia Co., Ohio River Rd., J. L. Betz, Gallipolis, waterbound gravel, concrete and gravel, $17,999; Hardin Co., Kenton-Upper Sandusky Rd., Latshaw & Stinchcomb, Fostoria, reinforced concrete, $32,992; Kenton-Upper Sandusky Rd., Federal Asphalt Paving Co., Hamilton, bituminous concrete, $35,700; Hocking Co., Logan-Chillicothe Rd., Gray Bros., Bowling Green, bituminous macadam, $23,800; Huron County, Savannah-Vermilion Rd., A. J. Baltes, Norwalk, $25,289; Licking Co., Newark-Fallsburg Rd., Vogelmier Bros., Newark, $32,203; Lorain County, Ashland-Oberlin Rd., the Highway Construction Co., Elyria; concrete, bituminous macadam, $25,429; Ottawa Co., Port Clinton-Marblehead Rd., Marsman & Green, Grand Rapids, Mich., $47,309; Putnam Co., Kalida-Lima Rd., Carey & McElroy, Ada, $10,600; Trumbull Co., Warren-Meadville Rd.; Seiple & Wolf Construction Co., Youngstown, $32,348; Trumbull Co., Canfield-Niles Rd., Morgan Bros., Ravenna, $28,661; Vinton Co., Gallipolis-McArthur Rd., John L. Porter, Marysville, $4865; Williams Co., Bryan-Pioneer Rd., Doan & Langenderfer, Toledo, waterbound macadam, $56,062, bituminous macadam, $67,476; D. W. Botkins & Son, Ada, bituminous macadam, $63,638; Wyandot Co., Upper Sandusky-Kenton Rd., Modern Construction Co., Fremont, $7606; Upper Sandusky-Tiffin Rd., Modern Construction Co., Fremont, $29,892.

O., Ashland—City received low bid paving portion Virginia Ave. from D. A. Philips, Ashland, $18,947. Noted July 12.

★O., Canton—City let contract paving 8th St., N.E., to Downs Constr. Co., Lawrence Rd. and Gibbs Ave. Noted Aug. 2.

★O., Cincinnati—(Official)—Bd. Trustees Cincinnati Southern Ry., Ingalls Bldg., let contract grading and paving Front St., in connection with building railroad track to Kirchner Constr. Co., West 9th St. About $45,000. Noted July 26.

★O., Cincinnati—Dept. Pub. Ser. let contract, paving, grading, curbing and draining, Scioto St. to R. E. Cash, 110 Lincoln Inn Court. About $14,000. Noted July 5.

★O., Cleveland—Bd. Control let contract paving portion East 24th St. to Freshwater Constr. Co., 9500 Madison Ave., $16,000; West 25th St. to Cleveland Trinidad Paving Co., The Arcade, $22,741.

★O., Lima—City let contract paving portion Bellefontaine Ave. to Johnson & Ritz, Napoleon, $48,073.

★O., Oberlin—City let contract paving and draining Union and North Main Sts. to C. E. Williams, Oberlin.

★O., Pioneer—(Official)—Village let contract paving various streets, involving 13,000 sq.yd. to Fuelling & Krudop, 1324 Eliza St. Noted Aug. 2.

★O., Sandusky—(Official)—City Comrs. let contract paving portion Adams, Fulton, Division and Boult Sts. to Cummings Prudden Co., 1907 2nd Natl. Bank Bldg., Toledo, $38,808. Noted Aug. 2.

★O., Sidney—City let contract brick paving, to G. H. Heffner Son & Co., Celina; asphaltic concrete paving to Columbus Asphalt Paving Co., 1115 Columbus Savings & Trust Bldg., Columbus; about 95,000 sq.yd. in all. Noted July 19.

Ind., Indianapolis—City received low bids paving portion Massachusetts Ave., about. 10 blocks, from American Constr. Co., 108 North Delaware St., $20,000, Union Asphalt Co., American Central Life Bldg., Republic Constr. Co., 1614 Merchants Bank Bldg.

Ind., South Bend—Bd. Pub. Wks. received low bids paving Mishawaka Ave. and Eddy St. from A. H. White Constr. Co., 1600 Railway Exch. Bldg., Milwaukee, $184,000; Williston Constr. Co., 343 South Dearborn St., Chicago; Federal Paving Co., 316 Rentscher Bldg., Hamilton, O. Noted Aug. 2.

★Ind., Terre Haute—Vigo Co. let contract paving portion 25th St., brick, to Weaver & Welch, Terre Haute, $70,382. Noted Aug. 9.

★Mich., Pontiac—(Official)—City let contract 2½ mi. 5-ft. walks to B. Smith, Pontiac, 14c. per sq.ft. Noted July 26.

★Mich., River Rouge—(Official)—Village let contract paving Henry St., east and west, Victoria, Oak and Batavia Sts., and Burke Ave. to Rice Constr. Co., Wyandotte, $45,000. Noted July 26.

★Ill., Belleville—Bd. Local Imprvs. let contract paving portion Illinois St. to Bauer Bros., Belleville, $10,800.

★Ill., Chenoa—City let contract paving streets to I. D. Lain, Bloomington, $56,037. Noted Apr. 12.

★Ill., Highland Park—City let contract paving portions Cedar, St. Johns and Linden Aves., concrete, bituminous concrete surface, to Western Improv. Co., Highland Park, $47,369.

Ill., Hillsboro—City received low bids paving Hamilton and Water Sts. from Sell & Koller, Pana, $26,406, Curdie Contg. Co., Hillsboro, $26,629. Noted Aug. 2.

★Ill., Naperville—City let contract paving 56,000 sq.yd. cement concrete to Logan & Giertz Constr. Co., Naperville, $125,000.

★Ill., Paxton—Bd. Local Improv. let contract paving Railroad Ave. and East Franklin St. to H. C. Finley, Hoopeston. About $27,208.

Ill., Rock Island—City received low bids improving 6th Ave., (a) concrete gutter and curb, (b) asphaltic concrete paving, (c) excavating, from McCarthy Improvement Co., 3rd and Perry Sts., Davenport, (a) $.65, (b) $2.05, (c) $.40; Ryan Constr. Co., 42 1st Natl. Bank Bldg., Davenport, (a) $.75, (b) $2.18, (c) $.40.

★Ill., Waukegan—City let contract paving Colony St. to C. Peterson Constr. Co., Kenosha and C. P. Moran, Waukegan. About $21,000.

★Wis., Ashland—City let contract paving to Franzen & Bystrom Bros., Ashland, $25,700.

Wis., Chippewa Falls—Bd. Pub. Wks. received low bids paving portions North Main and Willow Sts., from A. C. Larson & Co., and Cast Stone Constr. Co., both of Chippewa Falls. About $15,000.

★Ia., Davenport—Bd. Pub. Wks. let contract laying 12,872 sq.yd. paving, 4500 ft. curb and gutter to D. J. Ryan Constr. Co., 2nd St., $43,895.

★Ia., Des Moines—City let contract paving portions Locust, East 9th, Capitol Ave., East 11th and East 12th Sts., Texaco sheet asphalt, 80,000 sq.yd. including sidewalks to T. Carey & Sons, Clinton, $2.18 per yd. Noted Apr. 12.

★Kan., Pratt—City let contract paving 50,000 yd. to M. R. Ammerman, Salina.

★Neb., Havelock—City let contract paving 40 blocks to Abel Constr. Co., 318 Terminal Bldg., $110,000.

★Neb., Omaha—City let contract paving 1 mi. to Bauer & Johnson, Omaha; also repaving 1 mi. to W. E. Callahan, 1514 City Natl. Bank Bldg. Noted June 7.

Neb., Plattsmouth—(Official)—City let contract 12,850 yd. wire cut brick, and 7442 ft. curbing in Dist. No. 13 to Western States Constr. Co., 782½ Brandeis Bldg., Omaha. $30,621. Noted Aug. 2.

★S. D., Sioux Falls—City let contract paving portion 20th and 10th Sts., portland cement concrete and bitulithic to C. H. Atkinson, Watertown.

Streets and Roads (Continued)

★**Wyo., Sikeston**—City let Scott St. contract paving portions Malone Ave., asphalt and macadam, concrete base, to R. Williams, Wyatt, $29,573.

★**Mont., Butte**—City let contract grading and building sidewalks, portions Granite St. and paving portions main alley to G. D. Pue, Butte, $10,933. Noted July 5.

★**Mont., Butte** — City let contract improving Montana St., J. C. Maguire, 615 Daly Bank Bldg., bitulithic, $2.70 per sq. yd., 7066 ft. gutter, 50c. per ft., 4165 ft. 19-in. storm sewer, 95c. per ft., 18 catch basins, $35 each, 13 manholes, $50 each. Noted July 19.

★**Mo., Brunswick**—City let contract paving West Main St. to Kennedy Olson Constr. Co., 601 Ridge Arcade Bldg., Kansas City, $15,155.

Mo., St. Louis—Bd. Pub. Wks. received low bids paving Wilcox Ave., vitr. brick, 5-in. concrete base, from F. A. Stiers Constr. Co., 4512 Morgan St., $15,152, Eyermann Constr. Co., 1216 South Grand St., $15,311, Skrainka Constr. Co., Security Bldg., $15,985, repaving St. Charles St., wood block, Perkinson Bros. Constr. Co., 3237 Carter Ave., $11,794, Eyermann Constr. Co., 1216 South Grand St., $12,876, Fruin-Bambrick Constr. Co., 800 South Spring St., $14,544. Noted Aug. 2.

★**Ark., Devall Bluff**—Prairie Co. Rd. Improv. Dist. No. 3 let contract building macadam roads to S. G. Woodsman, Devall Bluff, $150,000. Noted Aug. 2.

★**Ark., Little Rock**—City let contract surfacing East Washington Ave., 2-coat asphalt surface to R. Moble, 104 East 2nd St., 15½c. per sq.yd. About $10,000.

★**Tex., Huntsville**—City let contract building 15,000 sq.yd. rein.-con. paving to G. L. Clark, Huntsville. Noted July 19.

★**Okla., Altus**—City let contract 12,500 yd. paving to Western Paving Co., 518 Terminal Bldg., Oklahoma City.

★**Okla., Ardmore**—City let contract paving portion B St. to Schuler & Petty, $27,098. Noted June 21.

★**Okla., Okemah**—Okfuskee Co. let contract road work to J. T. Thompson, Ringling, $14,342. Noted May 31.

★**Colorado** — (Official) — State Highway Comn., Denver, let contract building road from Estes Park to Grand Lake to R. W. McQueary, Granby, $21,021. Noted Aug. 9.

★**N. M., San Miguel**—City let contract paving Douglas Ave. to N. M. Morton Bros., Las Vegas, $31,354.

★**Idaho**—State Highway Dept., Boise, let contract building highway from Washington Co. line to Council to F. C. Comeford, West of Joplin Cemetery, $83,000. Noted July 5.

★**Idaho** — (Official) — State Highway Comn., Boise, let contract building 17 mi. Idaho-Utah Highway in Bancock Co. to S. A. Forter, American Falls, $38,000. Noted Aug. 2.

★**Idaho, Twin Falls**—City Council let contract, system of concrete walks, to C. H. Helmer, Twin Falls. About $43,715. Noted Apr. 19.

Idaho, Wallace—City received low bids paving 22,000 sq.yd. streets (a) standard bitulithic 2-in. macadam base, (b) 3-in. base, (c) 4-in. base, from H. J. Kaiser, 312 Colby Bldg., (a) $1.49; (b) $1.52; (c) $1.55; Warren Constr. Co., Journal Bldg., Portland, (a) $1.54, (b) $1.58, (c) $1.62. Noted July 26.

★**Utah, Ogden**—City let contract paving portions, Washington Ave. and Riverdale Rd., sheet asphalt, to P. J. Moran, Inc., 52 West 2nd St., Salt Lake City, $126,049.

★**Wash., Kelso** — Cowlitz Co. Court let contract improving 2⅓ mi. Pacific Highway, from Castle Rock South, to Jarvis & Burkheimer, Portland, $44,600. Noted Apr. 19.

Wash., Seattle—Bd. Pub. Wks. received low bids grading Eddy St. from Sloane Bros., White Bldg., $16,707; paving Roy St., from James Constr. Co., 812—2nd Ave. N., $42,500; Superior Constr. Co., 1642 Lane St., $43,152; A. L. Clark & Co., c/o Washington Paving Co., L. C. Smith Bldg., $43,765.

Oregon—State Highway Comn., Salem, received low bids grading and paving (a) Tillamook-Cloverdale Rd., 5⅓ mi.; (b) Columbia River Highway, 2 mi.; (c) Columbia River Highway, Wasco Co., 4.54 mi.; (d) Columbia River Highway, Columbia Co., 17.75 mi.; (e) road from Svensen to Westport, Clatsop Co., 15.5 mi.; (f) road from Condon to Thirty Mile Creek, Hilliam Co., 5.7 mi.; (g) road in Deschutes Co., 17 mi.; (h) road from North Co. line to Cummings Hill, Wheeler Co., 3.5 mi.; (i) road from Canemah to New Era, Clackamas Co. as follows: Warren Constr. Co., Journal Bldg., Portland, (a) $111,451, (b) $37,321, (d) $136,124 (e) $124,576, (f) $23,334, (g) $47,810, (h) $19,179, (i) $33,125; Oskar Huber, Electric Bldg., Portland, (a) $105,951, alternate, $110,307, (b) $38,419, alternate, $39,806; Wolf & Gibbons, The Dalles, (c) $24,970; Clark & Thillitin, Rainier, (d) $113,489; E. T. Johnson & Son, Commercial Bldg., Portland, (g) $61,260. Noted Aug. 2.

★**California** —(Official)— State Highway Comn., 515 Forum Bldg., Sacramento, let contract following road work: Santa Barbara Co., between El Capitan Creek and Alcatraz, Div. 5, Route 2, Sect. F, to Tryon & Brain, 501 Merchants Trust Co. Bldg., Los Angeles, between Elwood and El Capitan Creek, Div. 5, Route 2, Sect. G, to same contractor. Noted July 26.

Cal., Auburn — City received low bids paving Main St. from Blinn & Treacy, 1st Natl. Bank Bldg., San Francisco. About $17,700.

★**Cal., San Francisco**—Bd. Pub. Wks. let contract improving portion Corbett Ave. to H. Grummey, Hearst Bldg., $46,740.

★**N. S., New Waterford**—Town Council let contract 3100 ft. curbing and 1195 sq.yd. concrete sidewalks and 653 ft. sewer pipe, to D. H. McLean Co., New Waterford, $40,000.

★**Que., Hull**—City let contracts building concrete sidewalks to Bison & Bourque, Hull and Ottaway Constr. Co., Central Chambers. About $24,000 and $5500 respectively. Noted July 5.

★**Que., Portinuf**—Town let contract paving 2 mi. macadam roads to J. Ledere & Co., St. Basile de Portinuf, $25,000. Noted July 26.

★**Ont., Listowel**—Town let contract building pavements to W. Brennan and W. Hollingworth, Hamilton, $14,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Alabama—Montgomery Light and Traction Co. plans double tracking line from Montgomery to Pickett Springs, about 6 mi. W. J. Germevan, mgr.

Mississippi — Pearl River Valley R.R. chartered with $1,000,000 capital stock plans to build line from Nicholson to Columbia, about 55 mi. R. L. Emery, 2322 St. Charles Ave., New Orleans, pres.

Illinois—Galesburg Rockford & Northern R.R. incorporated with $200,000 capital stock, plans to build line from Galesburg to Rockford, through Knox, Henderson, Bureau, Whiteside, Lee, Ogle and Winnebago Cos. R. J. Emery, 19 South La Salle St., Chicago, one of incorporators.

Wisconsin — Green Bay & Eastern Ry. increased its capital stock from $50,000 to $3,000,000 and soon lets contract building 70 mi. electric railway from Manitowoc to Green Bay, thence to Sheboygan. Rudolph Stockinger, Manitowoc, secy. Noted Apr. 12.

Minnesota—Great Northern R.R. will build cutoff from Willmar line to Fridley terminal; also plans $20,000,000 bond issue for equipment, double tracking, sidings, terminals and new shops. A. H. Hogeland, St. Paul, ch. engr.

Montana—Montana Southern Ry. plans to extend Elkhorn Mining Dist. line from Dillon. About $500,000. Address E. E. Esselstyn, Butte. Noted May 24.

Texas—Freeport Sulphur Co., owned by Swenson Syndicate, New York, making surveys for proposed interurban electric railway from Freeport to Houston, via Rosenberg; about 100 mi. W. A. Randle, Freeport, ch. engr. Noted Aug. 9.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Pennsylvania**—Lehigh & New England R.R. let contract 6 mi. line between Bethlehem and Allentown to F. H. Clement, Land Title Bldg., Phila. Noted May 24.

★**Wisconsin**—Wisconsin Interurban Co., 350 Washington Bldg., Madison, let contract 250-mi. line to J. T. Adams, Columbus Savings & Trust Bldg., Columbus, First unit will be built from Madison to Janesville via Stoughton.

★**Washington**—Spokane Valley & Northern Ry., subsidiary of Great Northern Ry., let contract 14 mi. spur from Valley to quarries of American Mineral Production Co. to Genl. Constr. Co., 1324 Elm St., Spokane. About $300,000.

EXCAVATION AND DREDGING

Proposed Work

La., Lafayette — Drainage — Scott Subdrainage Dist., Lafayette Co., voted $47,500 bonds for system. L. A. Prejean, pres.

Ore., Klamath Falls — Irrigation — Pine Grove Irrigation Dist., Klamath Co., recently organized, plans system to water 1500 acres.

Cal., Fresno — Irrigation — Conservation and Irrigation Dist. Com. will organize irrigation district to conserve flood waters of Kings River. Plans include concrete dam with 600,000 acre-feet capacity in Pine Flats region, 10,000 kw. hydro electric plant, 525 deep well turbine pumping plants with 80 reserve plants in San Joaquin Valley, involving 1,050,000 cu.yd. excavation, $325,000; concrete masonry, $4,515,000; gates, $400,000; spillway, $200,000; flume for bringing lumber to site, $200,000; grouting, $20,000; cement gun work, $15,000; extending railroad, $100,000; roads, $50,000; power substation, $15,000; river diversion, $30,000; pumping and lighting, $10,000; drainage and well drilling, $15,000; power plant, $600,000; 30-mi. transmission line, $150,000 and 605 pumping plants $1,815,000. George C. Roeding, Fresno, chn. I. Teilman, care of Fresno Consolidated Canal Co., Fresno, engr.

Cal., San Bernardino — Irrigation — Bd. Supervs. plan to irrigate 48,000 acres in Apple and Victor valleys with annual flow of 90,000 acre-feet from Mohave River and Deer Creek. About $4,320,000.

BIDS DESIRED

La., New Orleans—Dredging—Until Sept. 12, by Bd. Comrs. Port of New Orleans, 200 New Orleans Court Bldg., dredging and maintaining specified depths of water at public wharves for period of 1 year. J. B. O'Reilly, engr.

Tenn., Hohenwald—See "Streets and Roads."

Ky., Calhoun—Until Aug. 30 by McLean Co. Drainage Comrs. building ditch and laterals, D.D. No. 8, involving 70,550 cu.yd. earth removal.

Ill., Thomson—(Official)—Drainage—Until Sept. 6 Franklin J. Stransky, atty. of Savanna & York D.D., Savanna, furnishing material, machinery and labor for pump houses, etc. E. T. Perkins, 1201 1st Nat'l Bank Bldg., Chicago, engr. Advertised in this issue.

Minn., Benson—Ditch—Until Aug. 27 by D. P. Carney, Swift Co. aud. building Judicial Ditch No. 4.

Minn., Madison—(Official)—Ditch—Until Sept. 8, (change of date), by A. G. Shogren, aud. Lac Qui Parle Co., building Co. Ditch No. 44 involving 12,750 ft. 8-, 9-, 10-, 12-, 14-, 15-, 16-, 18-, 20- and 22-in. tile, cost, $18,200; Ditch No. 4, 51,100 ft. 6-, 7-, 8-, 9-, 10-, 12-, 14-, 15-, 16-, 18-, 20-, 22- and 24-in. tile and 207,316 cu.yd. dredge work, cost, $58,409. B. Loftfield, engr. Noted Aug. 9.

S. D., Madison—Drainage—Until Aug. 28 by Lake Co. Comrs. building D.D. No. 9, involving 32,800 lin.ft. 5-, 6-, 7-, 8-, 10-, 12-, 14- and 16-in. tile. D. J. O'Connell, chn.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Tex., Mercedes** — Drainage — American Rio Grande Land & Irrigation Co. let contract drainage system in Rio Grande Valley to Crawford & Callahan. About $500,000.

Cal., Oroville, Butte Co.—Drainage—Dir. Reclamation Dist. No. 833 received bids excavating canals and drainage ditches from Kenyon & Whitman, $317,574 and Ross Constr. Co., $349,331, both of Forum Bldg., Sacramento.

INDUSTRIAL WORKS

Proposed Work

N. Y., Brooklyn — Interborough Rapid Transit Co., 165 Bway., New York City, plans 1-story, 53 x 100-ft. brick transformer station, Nostrand Ave. About $50,000. George H. Pegram, 165 Bway., New York City, ch. engr.

N. Y., Buffalo—American Brass Foundry Co. plans addition to plant.

N. Y., Buffalo—Sizer Forge Co., 238 Larkin St., had plans prepared, 1-story, 41 x 88 ft. coal house, 40 x 321 ft. covered scrap yard and 88 x 214 ft. electric furnace. About $109,500. A. H. Van Cleve, 238 Larkin Bldg., archt.

N. Y., Cohoes—Cohoes Rolling Mill Co., Canvass St., increased capital stock from $500,000 to $1,000,000 and plans extensions.

N. Y., Flushing—New York & Queens Electric Light & Power Co., 444 Jackson Ave., Long Island City, plans 2-story, substation. About $50,000.

N. Y., New York—F. A. Cella, 888 6th Ave., having plans prepared by J. W. Ingle, archt., 527 5th Ave., 5-story, 38 x 60-ft. garage, rein.-con., brick, 102-4 West 50th St.

N. Y., New York—C. E. Williams, 500 5th Ave., had plans prepared by E. Williams, archt., 500 5th Ave., 6-story, 50 x 100-ft. brick garage, 234 West 67th. About $50,000.

N. Y., Ogdensburg—City plans 2-story market house. About $70,000. Julius Frank, mayor. Williams & Johnston, 40 Ford St., archts.

N. J., Clifton—New Jersey Flour Mill, 1 Chester St., plans 2-story, brick warehouse addition. About $50,000.

N. J., Newark — Des Lauries Aircraft Corp., Jersey City, secured site on Mulberry St., Newark and plans to build. B. H. Dahlan, pres.

N. J., Passaic—New York Belting & Packing Co., 91 Chambers St., New York City, plans 5-story, 87 x 250-ft. brick and rein.-con. factory. Lockwood Green & Co., 101 Park Ave., New York City, archts.

Pa., Athens—Ingersoll-Rand Co. plans 1-story, 75 x 200-ft. machine shop and 1-story, 90 x 145-ft. addition.

N. C., Gastonia—Trenton Cotton Mills increased capital stock to $350,000 and plans extensions.

N. C., Morehead City—North Carolina Shipbuilding Co. has increased its capital stock to $200,000 and plans mill construction buildings.

N. C., Selma—Ethel Cotton Mill Co. increased its capital stock from $100,000 to $200,000 and plans to extend plant.

Ga., Columbus — Columbus Power Co., 1151 Broad St., plans additions and extensions to its present plant. About $200,000. John S. Bleecher, gen. mgr. Stone & Webster Engr. Co., 147 Milk St., Boston, engrs.

Ga., Tallulah—Georgia Ry. & Power Co., Atlanta, plans to build 6th unit of plant here to cost about $330,000; generating station 2 mi below Tallulah Falls power station, $3,000,000; reservoir above Rabun Lake, $1,500,000. C. G. Adsit, Atlanta, constr. engr.

Ala., Mobile—Kelly-Atkinson Constr. Co., Chicago, plans machine shop, blacksmith shop, power house and yard office. About $50,000. W. L. Kelly, 189 West Madison St., Chicago, pres.

Tenn., Memphis—S. S. S. Auto Co. plans 135 x 325-ft. garage. About $50,000. A. G. Field, pres.

O., Cleveland — Cuyahoga Varnish Co., 3820 Bessemer Ave., plans addition to plant. About $60,000.

O., Cleveland—Grabler Mfg. Co., 6565 Bway., soon lets contract 66 x 104-ft. brick, steel and rein.-con. foundry addition, 1115 East 152nd St. About $75,000. C. Schwarzenberg & Gaede, 1900 Euclid Ave., archts.

O., Cleveland — Smith Facing & Supply Co., Carter Rd., soon lets contract, 78 x 104 ft. factory. M. M. Morse & Co., Citizens Bldg., archts.

O., Columbus—State University plans to build 2 brick aviation buildings on campus. About $200,000.

O., Marion—Marion Packing Co. plans brick and concrete boiler house. About $125,000. Stadley Engr. Co., South LaSalle St., Chicago, engrs.

Ind., Aetna — Aetna Explosives Co., Bluffs Rd., plans rebuilding plant recently destroyed by fire. About $1,000,000. Chas. Martin, gen. supt.

Ind., Elkhart—J. E. Smith Son, c/o A. P. Dippold, archt., 4747 Cottage Grove Ave., Chicago, soon lets contract 2-story, 83 x 115-ft. public garage. About $50,000.

Ind., Richmond—Indiana Portland Cement Co., recently incorporated with $1,000,000 capital stock, plans to build plant. Adam L. Beck, Huntington, pres.

Mich., Detroit—Barnes Foundry & Mfg. Co., 79-81 B'way., plans factory between tracks Michigan Central & Detroit, Toledo & Ironton R.R. C. L. Barnes, pres.

Mich., Detroit—Natl. Biscuit Co., 42-56 Woodbridge St., plans new factory, Baltimore and 3rd Sts. About $1,500,000.

Mich., Muskegon Heights — Anderson Packing Co. having plans prepared by L. Lehle, archt., 38 South Dearborn St., Chicago for 1-story packing plant. About $150,000. J. S. Anderson, pres.

Ill., Chicago—Pioneer Paper Stock Co. plans 5-story, 50 x 109-ft. warehouse, Ohio St.

Ill., Moline—Moline Forging & Mfg. Co. soon lets contract 1-story, 110 x 264-ft. forging shop and office bldg. About $75,000. O. Z. Gerwin, 311 Safety Bldg., Rock Island, archt.

Wis., Milwaukee—Wevenberg Shoe Co., 212-27 Harmon St., had plans prepared, addition to shoe factory. About $200,000. F. L. Wevenberg, pres. Herman Esser, Camp Bldg., archt.

Tex., Texarkana—G. M. Stone, Quincey, Ill., and associates secured site here and plan machinery plant. Initial unit to cost about $100,000.

Okla., Ringling—Peoples Rendering Co., Insurance Bldg., Oklahoma City, plans new plant here. About $65,000. E. D. Smith, Oklahoma City, mgr.

Wash., Seattle—Pacific Oil Mills Co. soon lets contract 3- or 4-story, brick or concrete, oil refining plant, 2-story, warehouse and storage sheds. About $200,000. Herman Meyer, 1816 4th St., archt.

Wash., Tacoma—City Comrs. plan using Mineral Lake power site, with extensive improvements, as auxiliary to Nisqually plant. About $500,000. W. C. Raleigh, ch. engr.

Cal., Martinez—Pacific Electric Metal Co. plans large ferrosilicon factory including 4 or 5 concrete buildings with 10,000 kw. capacity, near Bay Point.

B. C., Princeton—Canada Copper Co. plans concentrating plant, 3000-ton capacity including hydro-electric plant. About $2,000,000.

BIDS DESIRED

O., Columbus—Until Sept. 4, by Trustees State University, for power house. About $100,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Buffalo—Pennsylvania R.R. let contract 2-story, 30 x 420-ft. brick and steel freight house, 2 bridges and platform, Louisiana and Seneca Sts. to G. H. Scheckler & Sons, Erie, Pa., $200,000.

★N. Y., Jamaica—Armour & Co., Union Stock Yards, Chicago, let contract, 3-story, brick warehouse, Rockton St. to Blome Sinek Co., Bway., New York City, $100,000. Noted May 17.

★N. Y., Johnson City—Endicott-Johnson Co. let contract 6-story, 80 x 300-ft. rein.-con. factory to Turner Constr. Co., 244 Madison Ave., New York City.

★N. Y., New York—New York Butchers Dressed Meat Co., 11th Ave. and 39th St. let contract 7-story, 98 x 120-ft. cold storage plant to Blome Sinek Co., 120 B'way. Noted Aug. 16.

★N. Y., New York—Wm. Pechter, 79 Ridge St., let contract 2 bakeries, 468-70 Cherry St., and 300 Monroe St., to Bradhurst Holding Co., 17 West 120th St. About $50,000.

★N. Y., Waterloo—Waterloo Mfg. Co. let contract rebuilding factory to F. T. Ley Co., 499 Main St., Springfield, Mass. About $50,000.

★N. J., Caldwell—Bd. Freeholders Essex Co., Newark, let contract addition to brick power plant, Essex Co. Penitentiary to W. G. Sharwell Co., 377 North 5th St., Newark, $75,000.

★N. J., Maurer—American Smelting & Refining Co., 120 Bway., New York City, let contract 4-story, 55 x 60-ft. steel, frame and hollow tile coal pulverizing mill to H. D. Best & Co., 52 Vanderbilt Ave., New York City.

★Md., Baltimore—Maryland Shipbuilding Co. let contract shop, shipways and sheds, Sollers Point, to Morrow Bros. Constr. Co., 1201 Fidelity Bldg., project to cost several hundred thousand dollars.

★Ky., Russell—Chesapeake & Ohio R.R. 1st Natl. Bank Bldg., Richmond, Va., let contract, 1-story, 5-stall roundhouse to J. R. Pettyjohn & Co., 202 8th St., Lynchburg, Va.

★O., Cleveland — Cleveland Tractor Co. let contract, brick, steel and concrete factory, to Sam W. Emerson, 1900 Euclid Ave. About $350,000.

★O., Cleveland—Grant Motor Co., Kirby Ave., let contract, addition, Coit Rd. and Kirby Ave., to W. I. Thompson & Son Co., 6110 Euclid Ave. Noted May 31.

★O., Cleveland—McClellan File Co., 3444 Hamilton Ave., let contract, 2-story, 90 x 120-ft. brick factory to John P. Ford & Son, 9523 Preston Ave. Noted Aug. 2.

★O., Toledo—Hettrick Bros. Co., Hoag and Fernwood Sts., let contract 2-story, 25[illegible] x 330-ft. factory to Schmidt-Harwood Co. Noted June 28.

★Mich., Detroit—Winkley Mfg. Co., 86[illegible] West Warren Ave., let contract 3-story brick and steel factory, to W. E. Wood Constr. Co., 1805 Ford Bldg.

★Ill., Blue Island—Libby, McNeil & Libby United Stock Yards, Chicago, let contract, packing house, to C. A. Moses Constr. Co., 133 West Washington St., Chicago About $500,000.

★Ill., Chicago—Louis Schetnitz, Jackson Blvd. and Market St., let contract 7-story brick factory, 1032-46 Kingsburg St., to Scharmer Constr. Co. About $150,000.

★Wis., Madison—Northwestern Ordnance Co. let contract 50,000-sq.ft. factory to Worden-Allen Co., Milwaukee.

★Wis., Milwaukee — Wisconsin Gun Co. let contract 1-story, 130 x 300-ft. factory to Worden-Allen Co., Milwaukee.

★Minn., St. Cloud—Pan Motor Co. let contract, 1-story, 56 x 715-ft. 56 x 415-ft., 50 x 60 and 50 x 100-ft. assembling plant to Madsen & Peterson, 802 Plymouth Bldg., Minneapolis, on percentage basis. About $250,000.

★Minn., St. Paul — Chicago, St. Paul, Minneapolis & Omaha R.R. let contract, 1-story, 53 x 85 ft. power plant and 80 x 264-ft. engine house addition and tender house to W. Baumeister Co., 1203 Pioneer Bldg. About $290,000.

Cal., Bay Point—Pacific Electric Metals Co. let contract factory to Lindgren & Co., Monadnock Bldg., San Francisco. About $50,000.

★Ont., Belleville—Graham Co., Ltd., let contract cold storage warehouse to W. F. Sparling Co., 120 Bay St., Toronto. About $100,000.

★Ont., Windsor—Maxwell Motor Co. let contract 2-story, 100 x 30-ft. rein.-con. plant to R. Westcott, Woodward and Warden St., $130,000.

BUILDINGS

Proposed Work

Me., Portland — Theater, Store, Office — Nickel Amusement Co., 565 Congress St., plans 2-story, 129 x 132-ft. additions. About $100,000. Fred N. Dow, pres. T. W. Lamb, 644 8th Ave., New York City, archt.

Mass., Athol—Church—First Methodist Episcopal Congregation plans 1-story, 84 x 90 ft. About $60,000. Rev. E. V. Hinchliffe, 105 Main St., pastor. E. T. Chapin, 340 Main St., Worcester, archt.

Conn., Storrs — Connecticut Agricultural College having plans prepared, 6 new buildings, by Unkelbach & Perry, 162 Main St., New Britain. About $75,000.

Buildings (Continued)

N. Y., Buffalo—Church—St. John Baptist Ruthenian Church had plans prepared by W. H. Zawadzki, archt., 1-story, 60 x 92-ft. brick, Filmore St. and Oneda Ave. About $50,000. Father H. Ortynsky, 153 Germain St., pastor.

N. Y., Greece—High and Grade School—Bd. Educ. having plans prepared by C. Ade, archt., 346 East Ave., Rochester, 2-story, 80 x 90-ft. brick and steel. About $75,000.

N. Y., North Tarrytown—Hospital—I. L. Rice Memorial Hospital for Convalescents, c/o I. L. Rice, Jr., 61 B'way., New York City, having plans prepared by H. B. Herts, archt., 507 5th Ave., New York City, 3-story, 150 x 350-ft. brick and stone. About $400,000.

N. J., Asbury—Natatorium—City Comn. will sell $100,000 bonds for rebuilding and installing machinery. H. B. White, city clk.

N. J., Jersey City — Clubhouse — Lodge 211, B. O. P. E., plans, 4-story. About $100,000. Patrick Powers, chn. bldg. comn. W. Neumann, 314 Palisade Ave., archt.

Pa., Edge Hill—Club House—Lulu Temple Country Club plans 3-story, 30 x 70 ft. About $150,000. C. T. Martin, c/o Kensington Trust Co., Kensington and Allegheny Aves., Phila., pres. G. W. Castor, archt., Stephen Girard Bldg., Phila., soon receives bids.

Pa., Farrell — Club House — American Sheet & Tin Plate Co., Frick Bldg., plans, brick, Buhl Terrace and Indiana Ave.

Del., Newark—Women's Dormitory—Delaware College plans 4-story, 30 x 48 ft. About $75,000. S. Mitchell, pres. Day & Klauder, archts., 925 Chestnut St., Phila., soon receive bids.

Va., Lynchburg—Y. M. C. A., Lynchburg had plans prepared. About $75,000.

Va., Petersburg — Theater and Store — Century Amusement Co., Center Sq., plans, 1-story. About $50,000. Walter Sachs, pres. C. K. Bryant, Craig & Isbell, Lehigh Bldg., archts.

W. Va., West Liberty—Dormitory—State Bd. Control, Charleston, soon receives bids, 56.10 x 181.10 ft., brick, and 2 porches. F. F. Faris, Schmulbach Bldg., Wheeling, archt.

Fla., Vero—Clubhouse—G. H. Burrows Development Co. plans 5 or 6-story, clubhouse and beach resort. About $1,000,000. G. H. Burrows, 526 Guardian Bldg., mgr. Howell & Thomas, 2032 Euclid Ave., archts., both of Cleveland.

La., Merryville—High School—Bd. Educ. plans $75,000 bond issue for high school.

Ky., Covington—School—City plans election Nov. 6 to vote on $250,000 bond issue for completing school. Address J. J. Craig, mayor.

Ky., Dawson Springs—Hotel—Karlsbad Hotel Co. of America soon receives bids, 450 x 660 ft. casino, hospital, clubhouse and bath house. About $4,000,000. T. R. Troendle, pres. W. Ahlschlager, 1740-44 Conway Bldg., Chicago., archts.

Ky., Lexington—City Hall, Bd. Comrs. plan large auditorium and city hall. A. Rogers, mayor.

O., Akron—Home—Akron Eagles Lodge, plans 3-story, 66 x 165-ft., Market and Summit St. Abut $150,000. Forest City Engr. Co., 512 Hippodrome Bldg., archts.

O., Cleveland — Church — Fourth Holy Spirit Congregation having plans prepared by Briggs & Nelson, archt., 669 Rose Bldg., brick, East 107th St. About $200,000.

O., Cleveland — Hotel—G. A. Tenbush, Union Bldg., and associates, having plans prepared by H. T. Jeffery, archt., Union Bldg., 12-story brick, Euclid Ave. and 59th St. About $500,000.

O., Cleveland—Office—Physicians & Dentists Co., c/o R. H. Lee, archt., American Trust Bldg., had plans prepared, 16-story, brick and steel. About $1,000,000.

O., Cleveland—Store—Kendal Seed Co., Ontario St., plans 4-story, 40 x 83 ft., 210-16 Prospect Ave. About $50,000. Bonhard & Parsons, 1900 Euclid Ave., archts.

O., East Cleveland—(Cleveland P. O.)—Hospital—Hospital Comrs. plan, 4-story, brick, rein.-con. and steel. About $200,000. W. Hirsh, 1303 Swetland Bldg., Cleveland, archt.

O., Lima—Office—Lima Steel Castings Co., South Shawnee St., plans.

O., Zanesville — City Hall and Market house—City Council plans $100,000 bond issue to build.

Mich., Pontiac—Church—First Presbyterian Congregation soon lets contract, 1-story, 75 x 132-ft. About $50,000. C. S. Griese, 6408 Euclid Ave., Cleveland, archt.

Ill., Chicago—Church and Chapel—Grace Episcopal Congregation plans to build. About $200,000. Rev. W. O. Waters, 2001 Prairie Ave., pastor. Lowe & Bollenbacher, archts., 14 East Jackson St., soon receives bids.

Ill., Chicago—Hotel—Kercher Hotel and Bath Co. had plans prepared, 10-story, 80 x 170 ft. J. Kirchner, 505 South Wabash Ave., pres. W. Ahlschlager, archt., 111 West Washington St., soon receives bids. Noted Aug. 2.

Ill., Chicago—Hotel—Winnidemere Hotel East 56th St. and Hyde Park, plans 12-story, 180 x 360-ft. brick, steel and granite addition. About $2,250,000. C. W. George L. Rapp, 69 West Washington St., archts.

Ill., Kewanee—Hospital—Kewanee Pub. Hospital Assn., c/o Mrs. W. F. Jones, 309 Tremont St., having plans prepared by J. G. Beadle, archt., Galesburg, 3-story. About $75,000.

Ia., Boone—School—City voted on $60,000 bond issue for Jordan consolidated school. B. T. Duckworth, secy. bd. educ.

Ia., Chariton—Hospital—Lucas Co. plans election Oct. 15 to vote on $50,000 bond issue for co. hospital. F. M. Wilson, aud.

Ia., Dike — School — City voted $70,000 bond issue to build school. J. J. Schultz, secy bd. educ.

Ia., Earling—Church—St. Josephs Congregation plans 1-story, 80 x 140 ft. About $60,000. Rev. J. Stwiger, Earling, pastor. A. Dohman, 1st Natl. Bank Bldg., Milwaukee, archt.

Ia., Iowa City—Hospital—State University of Iowa plans hospital for cripples. About $150,000. J. M. Fisk, supt. bldgs. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., Des Moines, archts.

Ia., Jordan — High School — Bd. Educ. plans twp. high school. About $60,000.

Ia., Mingo—School—Bd. Educ. plans 2-story, 60 x 90 ft. About $50,000. S. M. Berkley, secy. Proudfoot, Bird & Rawson, Hubbell Bldg., Des Moines, archts.

Ia., Sioux City—Auto Sales — Lessnick Estate, care of Beuttler & Arnold, archts., 609-10 Security Bldg., had plans prepared, 3-story. About $50,000.

Minn., Duluth—High School—Bd. Educ. to sell $150,000 bonds Aug. 24, for central high school. C. A. Bronson, clk. bd. educ.

Kan., Pittsburg — High School — City plans election soon to vote on $200,000 bond issue for high school. W. B. Ittner, Bd. Educ. Bldg., St. Louis, archt.

Kan., Pittsburgh—Normal School—State plans 3-story, 100 x 100 ft. About $200,000. T. A. Kimball, Topeka, mgr. bd. administration. C. H. Chandler, State House, Topeka, archt.

Neb., Lincoln—Office—Rudge & Gunzel Co., 11th and O Sts., plans 7-story, 57 x 100 ft., N St.

Neb., Omaha—Nebraska Telephone Co., 18th and Douglas Sts., will issue $500,000 new stock, also construct new building. About $350,000.

Neb., Omaha — Comfort Station — City Comrs. plan $50,000 bond issue to build. T. J. O'Connor, city clk.

Neb., Omaha — Police Station — City Comrs plan $100,000 bond issue to build. T. J. O'Connor, city clk.

Neb., Scottsbluff—Station—Chicago, Burlington & Quincy R.R. had plans prepared, 42 x 125-ft. station and 24 x 47 ft. general waiting room. About $85,000.

Mont., Bozeman—Junior High School—Bd. Educ. Dist. No. 7, had plans prepared, 2-story, 60 x 100-ft. About $95,000. F. F. Willson, archt.

Mo., St. Louis—Theatre and Store—Consolidated Theatres Co., Holland Bldg., had plans prepared, 2-story, 70 x 146 ft. About $75,000. W. Goldman, pres.

Tex., Denton—Normal School—Bd. Regents having plans prepared by C. H. Page & Bros., archts., Austin Natl. Bank Bldg., Austin, North Texas State Normal School. About $85,000.

Tex., San Marcos—Normal School—Bd. Regents having plans prepared, Southwest Texas State Normal School, by C. H. Page & Bros., archts., Austin Natl. Bank Bldg., Austin. About $85,000.

Colo., Denver—Museum—City plans wing addition to Colorado Museum, City Park. About $50,000.

Wash., Orting—Hospital—Soldiers' Home plans 2-story and wing here. About $50,000. Andrew Willatzen, Boston Blk., Seattle, archt.

BIDS DESIRED

Mass., Athol—Church—Until Aug. 28, by Athol Methodist Episcopalean Church Society, 1-story, 84 x 90 ft. About $70,000. E. T. Chapin, State Mutual Bldg., Worcester, archt.

N. Y., Albany—(Official)—Laboratory—Until Sept. 7, by H. M. Biggs, M.D., comr. state health dept.; advertised in this issue.

N. Y., Rochester—Junior High School—Until Aug. 31, by Bd. Educ. for 3-story, 226 x 234-ft. rein.-con. Gordon & Madden and W. G. Kaebler, 300 Sibley Block, archts. Noted July 26.

N. J., Englewood—High School — Until Sept. 5, by Bd. Educ., Englewood Ave., Guilbert & Butelle, 665 Broad St., Newark, archts.

O., Kent—Grade and High School—Until Sept. 5, by F. Bechtie, clk. bd. educ., Main St., Franklin Twp., 2-story. About $100,000. Mills & Millspaugh Co., 67 East Long St., Columbus, archts.

Mich., Detroit—School—Until Sept. 4 by Bd. Educ., Wayne Co., Springwells Twp. E. C. Van Leyen and E. A. Schilling, 1115-21 Union Trust Bldg., archt.

Minn., Faribault—School—Until Aug. 28, by State, 2-story, 50 x 170-ft. custodial cottage at School for Feeble-minded. About $75,000. C. H. Johnston, 715 Capital Natl. Bank Bldg., St. Paul, archt. Noted July 19.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Vt., Randolph—Hotel—A. E. Chandler let contract 2- and 5-story, brick, terra cotta block to Foundation Co., Woolworth Bldg., New York City. Percentage basis. Noted May 3.

★N. Y., Albany—Store and Office—James L. Holland, 225 West 78th St., let contract, 4-story, 50 x 80 ft., and 4-story, 42 x 70 ft. brick addition, at James and Steuben Sts., to A. Panzieri & Co., 105 Hudson Ave. About $75,000.

★N. Y., New York—Office—Furness, Withy & Co., Ltd., let contract, 8-story, 55 x 72 ft., brick, to John T. Brady & Co., 103 Park Ave. About $200,000.

★N. Y., Poughkeepsie—Store and Office—Morgan House Corp. let contract, 3-story, 61 x 132-ft. brick and stone, northwest corner Catherine and Main Sts. to Kingston & Campbell, 1 Washington St., $100,000.

★N. Y., Rochester—School No. 16—Bd. Educ. let contract, 1-story, 120 x 128-ft. addition, to J. H. Schoenheit, 1132 Granite Bldg. About $52,836.

★N. Y., South Nyack—(Nyack P. O.)—Clubhouse—Nyack Club, New York City, let contract, 4-story, 58 x 100 ft. to N. W. & H. DeBaum, 28 Jackson Ave., Nyack.

★O., Canton—Church—St. Charalampos Greek Orthodox Congregation, Massillon, let contract to T. D. Casselman, Canton. About $75,000.

★O., St. Paris—High School—Bd. Educ. let contract to E. E. Beckett, Columbus. About $75,000. Noted July 26.

★Ind., Evansville — (Official) — Junior High School—Bd. Educ. let contract, 2-story, 85 x 300 ft. to M. J. Hoffman Constr. Co., Rookery Bldg. Noted Aug. 9.

★Mich., Vassar — School — Bd. Educ. let contract, rebuilding 3-story, 70 x 148-ft. to M. B. Hungerford, Lakeview. About $55,000. Noted Aug. 9.

★Wis., Ashland—Hospital—Ashland General Hospital, care of A. T. Pray, let contract 3-story, 42 x 100-ft. to Pugh & Rundlett. About $65,000. Noted June 7.

★Wis., Kenosha—Hotel—Maxine Carlton Hotel Co., Pub. Service Bldg., let contract, 8-story, 60 x 125-ft. rein.-con. to George W. Stiles Constr. Co., 11 South Lasalle St., Chicago. About $200,000. Noted May 3

Buildings (Continued)

★Wis., Ladysmith—Convent and Hospital—Mantelate Sisters of St. Marys let contract 3-story, 50 x 120 ft. and 2-story, 50 x 90 ft. respectively, to Hans P. Knudson, Waupaca. About $175,000. Noted July 12.

★Minn., Warroad — High School — Bd. Educ. let contract 58 x 64 ft. to Laurence Constr. Co. About $60,000. Noted May 31.

★Kan., Great Bend—Court House—Barton Co. let contract 4-story, 102 x 124-ft. rein.-con., to Manhattan Constr. Co., 3rd and Fondulac Sts., Muskogee, Okla. About $250,000. Noted July 19.

★Cal., San Francisco—Bank and Office—Amer. Natl. Bank let contract, 10-story, Montgomery and California Sts., to P. J. Walker Co., Monadnock Bldg. About $600,000.

★Que., Maisonneuve — School — Roman Catholic School Comrs., 87 Catherine St., N., let contract to J. A. Durocher, 201 Chambly St. About $175,000.

★Ont., London—Office—Utilities Bd. let contracts hydro office, brick, to J. W. Carwise, 74 Wharncliffe Rd., rein.-con. to Bains & Peckover, 95 Esplanade, Toronto. About $100,000.

★B. C., Vancouver — Exchange — B. C. Telephone Co. let contract to Adkinson & Dill, Wellington Blk., $90,000.

FEDERAL GOVERNMENT WORK

Proposed Work

N. Y., Iona Island—Buildings—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., plans to build 2 temporary buildings. About $60,000.

Pa., Dubois—Post Office—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., rejected bids opened Aug. 9. Noted June 28.

Pa., Ft. Mifflin—Chief Gunners' Quarters—Bureau of Yards and Docks, Navy Dept., Wash., rejected bids opened Aug. 13. Noted Aug. 2.

Wash., D. C.—Buildings—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., plans to build 5 temporary buildings at Lake Denmark. About $150,000.

BIDS DESIRED

Wash., D. C.—Storehouse—Until Aug. 27 by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., for storehouse at Hampton Roads.

Va., Norfolk — Tank and Tower — Until Aug. 27 by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., furnishing and installing 150,000 gal. elevated steel tank and tower.

Ky., Glasgow—Post Office—Until Sept. 26 by J. A. Wetmore, superv. archt., treas. dept., Wash.

Ind., Kendallville — Post Office — Until Sept. 21 by J. A. Wetmore, superv. archt., treas. dept., Wash.

Mich., Detroit—Air Compressors—Until Aug. 27 by Light House Inspector, furnishing 2 oil engine-driven air compressors for Sand Hills Light and Fog Signal Station.

N. M., Raton—Building—Until Sept. 12 by J. A. Wetmore, superv. archt., treas. dept., Wash., for public building.

Cal., Mare Island—(Vallejo P.O.)—Electric Traveling Cranes—Until Aug. 28 by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., furnishing electric traveling cranes for extension to machine shop.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—Locomotive and Crane Shed—Bureau Yards and Docks, Navy Dept., Wash., received low bids (work complete), from Howard Bros., 412 Dorchester St., South Boston, $27,753; C. M. Leach, Boston, $29,983.

★N. Y., New York—Embarkation Camp—N. B. Baker, secy. War, let contract, near New York City to McArthur Bros., New York, cost plus percentage.

★Md., Annapolis — Temporary Officers' Quarters—Bureau of Yards and Docks, Navy Dept., Wash., let contract to J. H. Miller, Eutaw and Franklin Sts., Baltimore, cost plus percentage basis.

Wash., D. C.—Radio Receivers—Supply Officer, Navy Dept., received low bids furnishing 150 long wave radio receivers, from Marconi Wireless Telegraph Co., of America, 233 Bway., New York City, $63,750; Natl. Electrical Supply Co., 1330 New York Ave., $71,250; De Forest Radio Telephone and Telegraph Co., $93,000.

Wash., D. C.—Portable Wave Meters—Supply Officer, Navy Yard received low bids furnishing 500 meters from Marconi Wireless Telegraph Co. of America, 233 Broadway, New York City, $93,925; Wireless Improv. Co., 81 New St., New York City, $99,500; Natl. Electrical Supply Co., Wash., D. C., $110,000.

★Va., Newport News — Embarkment Camp—B. N. Baker, secy. War, let contract near Newport News to Westinghouse Church Kerr Co., 37 Wall St., New York City, cost plus percentage.

★S. C., Charleston—Storehouse—Bureau of Yards and Docks, Navy Dept., Wash., let contract to Feeney & Sheehan Bldg. Co., State House, Albany, $210,415, time 400 days. Noted Aug. 16.

Ga., West Point—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids from W. J. Brent, 506 Bd. Trade Bldg., Norfolk, $42,819; W. P. Francis, 83 Mariette St., Atlanta, $49,950; W. H. Fissell & Co., 1328 Bway., New York City, $59,000. Noted July 12.

Ky., Lancaster—Post Office—J. A. Wetmore, superv. archt., received low bids (a) wood column, (b) steel column, as follows: A. W. Lane, 19 South La Salle St. (a) $27,764, (b) $28,496; F. A. Steininger Constr. Co., Victoria Bldg., St. Louis, (a) $30,988, (b) $31,478; H. G. Mitchell, Scottsburg, Ind., (a) $31,853, (b) $32,278. Noted Aug. 2.

Ariz., Globe—Post Office—Court House—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bid from C. E. Goodhand, Wahoo, $105,000. Noted July 5.

Wash., Puget Sound—(Bremerton P. O.)—Storehouse—Bureau Yards and Docks, Navy Dept., Wash., received low bids (a) net price, (b) omission 9th story, from A. W. Quist Co., New Times Bldg., Seattle, (a) $505,211, (b) $32,110; Sound Constr. Co., 72 Union St., Seattle, (a) $506,000, (b) $28,308; H. Peterson, Seattle, (a) $507,124, (b) $24,454. Noted July 12.

★Wash., Puget Sound—2 Steel Watertanks and Towers—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., let contract to Omaha Structural Steel Works, 48th and Leavenworth Sts., Omaha, $16,150.

★Cal., San Pedro—Temporary Submarine Base—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., let contract to Regan & McLinn and T. L. Baker, 271 East Ave. 52, both of Los Angeles.

MISCELLANEOUS

Proposed Work

Wharf—Mass., Wareham—City rejected bids. New bids soon. About $13,000.

Creek Improvements—Binghamton, N. Y.—Council voted to issue $25,000 bonds to improve creeks. J. A. Gibel, city engr.

Garbage Disposal Plant—Flushing, N. Y. Bureau of St. Cleaning having plans prepared for new plant on 31st Ave. About $100,000. H. Liebau, Post Office Bldg., Jamaica, archt.

Towers — Newark, N. J. — Butterworth-Judson Co., Ave. R, will build brick, steel and concrete condensing towers, 22 x 33-ft. and 12 x 33-ft. About $65,000.

Incinerating Plant—Trenton, N. J.—City Comn. plans addition. About $55,000. G. B. La Barre, dir. pub. safety. J. R. Fell, Jr., city engr.

Track Elevation—Tullytown, Pa.—Pennsylvania R.R. plans to elevate tracks over Chestland, Fallsington and Oxford Aves. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Wharves, etc.—Savannah, Ga.—Atlantic Coast Line plans to spend about $50,000 or $75,000 to improve wharves, docks and freight houses. J. E. Willoughby, Wilmington, ch. engr.

Harbor Improvements—Mobile, Ala.—Citizens voted $600,000 bonds for harbor improvements at Arlington site. Project includes pier 8000 ft. long. W. Smith, city engr. Noted Aug. 9.

Sea Wall — Detroit, Mich. — (Official) — Dept. Pub. Wks. soon receives bids repairing concrete and timber sea wall, 24th St. About $15,000. C. W. Hubbell, city engr.

River Improvement—Kansas City, Mo.—Bd. Pub. Wks. approved ordinance, improving, widening, dredging and damming the Blue River and building a levee. About $100,000 is available.

Parks and Playgrounds—St. Louis, Mo.—City election Nov. 6 to vote on $2,750,000 bonds for parks and playgrounds. E. R. Kinsey, pres. bd. pub. ser.

Incinerator—St. Louis, Mo.—City election Nov. 6 to vote on $250,000 bonds for garbage incinerator. Noted May 10.

Park Improvements—Beaumont, Tex.—City voted $100,000 bonds to improve parks. J. G. Sutton, clk. Noted July 5.

Levees—Blythe, Cal.—Palo Verde Joint Levee Dist. and Mutual Water Co. plans $500,000 bond issue plus sum sufficient to acquire levees, to construct levees and drain lowlands. C. Allison, engr.

BIDS DESIRED

Pumping Machinery—Brockton, Mass.—Until Sept. 6, by Sewerage Comrs., City Hall; advertised in this issue.

Shaft—N. Y., New York—Until Sept. 5, by Pub. Ser. Comn., 120 Bway., building shaft No. 2, Route No. 26, part of Queensboro Subway Rapid Transit Ry.

Levee Work—New Orleans, La.—(Official)—Until Sept. 4, by Bd. Levee Comrs. of Orleans Levee Dist., Suite 201, New Court House Bldg., for about 165,000 cu.yd. earthwork, length 7700 lin.ft., and removal and reseting 7700 lin.ft. wooden revetment, Lower Beka New Levee, 5th Dist., west bank Mississippi River.

Dam—San Diego, Cal.—(Official)—Until Sept. 4, by City Clk. A. H. Wright, constructing lower Otay Dam, independent spillway and outlet tower with connections involving 30,000 cu.yd. excava., 75,000 cu. yd. concrete, 20,000 cu.yd. mass rock and 1500 lin.ft. of hole for grouting foundations, 6000 cu.yd. excava., 2000 cu.yd. concrete and 750 cu.yd. rein.-con. Noted May 17.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Tide Gate, etc.—New Haven, Conn.—City let contract tide gate with spillways and river walls at Mill River on North State St. to C. W. Blakeslee & Sons, 58 Waverly St., $74,000. Noted July 26.

Timber Bulkhead—Albany, N. Y.—(Official)—L. W. Stotesbury, adjutant gen. let contract to A. M. Hazell, Inc., 26 Cortlandt St., New York City, $40,835. Noted Aug. 9.

★Station Finish—Brooklyn, N. Y.—(Official)—Pub. Ser. Comn., 120 Bway., New York City, let contract station finish for part of Culver Rapid Transit R.R. to Morthenson Woodworking Co., Inc., 65th St. and 3rd Ave.

★Retaining Wall—Allenport, Pa.—Pittsburgh Steel Products Co. let contract concrete retaining wall along river front between here and Stockdale to F. M. Wichert & Co., Hartje Bldg., Pittsburgh. About $100,000.

★Spillway—Hillsboro, Ill.—Bd. Local Improv. let contract to Koler & Sell, Pana.

★Causeway—Galveston, Tex.—Galveston Co. let contract rebuilding to Larkin & Sanhster, Morgan Bldg., Buffalo, N. Y., $550,000.

★Wharf—Houston, Tex.—City let contract, rein.-con., foot of Main St., to Horton & Horton, McKinney and Velasco Sts. About $47,000. Noted July 26.

Lumber to the extent of twenty-five million feet of lumber and timber are wanted in France at an early date it is reported, for the use of the American expedtionary forces. This will supply some of the needs of the troops for forest products until the American forest engineer regiments reach France and begin cutting. It is reported that 10.000.000 ft. of lumber and timber should be delivered in France by Sept. 1, 8,000,000 ft. by Oct. 1, and 5.000.000 ft. additional by Nov. 1. All this is said to be in addition to the 4.000,000 ft. of dock timber and lumber for which the engineer corps of the army opened bids July 21. The material wanted for use in France is described by lumbermen as square and sound. It is needed for wharves and docks, railroads, bridgework and terminal construction. It is said that it may all be bought within a hundred miles of the seacoast in order to insure prompt delivery. Samuel M. Felton, president of the Chicago & Alton R.R., who is in charge of arrangements for the ten or twelve regiments of railroad engineers for service in France, is much interested in the plans for buying American timber and lumber for use in France.

PUMPING STATION, NEWARK, N. J.

Bids were received by Passaic Valley Sewerage Commissioners for foundations and connections for Wallington pumping station, from (A) Carrington Constr. Co., River Rd., Passaic; (B) L. L. Brown, Inc., 30 Church St., New York City; (C) Linde & Griffith Co., 4th Ave., Newark; (D) Clup Co., Inc., East 43rd St., Paterson, $151,336. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
Earth excavation and refilling, in trench, for 54-inc. concrete sewer and for 36-inch concrete sewer (lump sum)	$4,500.00	$3,600.00	$3,350.00
Earth excavation for foundations for pumping station, coal house, suction sewer, etc., save those included under item 1 (lump sum)	27,500.00	116,00.00	40,950.00
50 cu.yd. rock excavation, in open excavations	5.00	5.00	3.00
500 cu.yd. concrete masonry, class A, 1:2:4, with Portland cement	11.00	16.50	9.00
3800 cu.yd. concrete masonry, class B, 1:2½:5, with Portland cement	8.50	11.25	8.50
30 cu.yd. brick masonry with Portland cement mortar	24.00	27.00	25.00
1500 long tons rip rap, in place	3.25	4.60	2.50
Cast iron pipes and specials, 36 in., with 4—36-in. gate vaves, 1—36-in. Venturi meter, wall castings, etc., complete in place (lump sum)	9,400.00	12,030.00	11,900.00
12,000 lin.ft. timber piles, for support of masonry structures, in place	0.45	0.50	0.40
260,000 lb. steel for reinforcement, floor frames, etc., in place	0.07	0.085	0.075
800 sq.yd. broken stone road surfacing, complete	1.40	1.80	1.50
Ventilating ducts and surface drains complete (lump sum)	950.00	1,070.00	920.00
Tide gates, for openings 48 x 48 in., one set of two gates, complete and in place (lump sum)	800.00	1,100.00	950.00
150 sq.yd. cobble stone gutters, complete	2.50	1.60	2.00
2000 cu.yd. earth filling for grading about pumping station	1.10	0.50	0.50
Timber bulkhead, complete and in place (lump sum)	10,400.00	10,910.00	11,450.00
Extended totals	$124,490.00	$134,650.00	$137,770.00

PUMPING STATION—NEWARK, N. J.

Bids were received by Passaic Valley Sewerage Commissioners for foundations and connections for Yantacaw pumping station, from (A) J. F. Shanley Co., 31 Clinton St., Newark; (B) L. L. Brown Co., 30 Church St., New York City; (C) O'Gara Constr. Co., 127 Frelinghuysen Ave., Newark; (D) Harrison & Daly, New York City, $113,352; (E) Cadmus Constr. Co., Inc., 120 Liberty St., New York City, $126,475. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
460 lin.ft. earth excavation and refilling, in trench, for 24-in. concrete sewer	$40.00	$45.00	$37.00
Earth excavation for foundations for pumping station, suction sewer, etc., save those included under item 1 (lump sum)	22,000.00	16,500.00	31,000.00
50 cu.yd. rock excavation, in open excavations	6.00	4.50	5.00
250 cu.yd. concrete masonry, class A, 1:2:4, with Portland cement	13.50	17.90	13.00
1350 cu.yd. concrete masonry, class B, 1:2½:5, with Portland cement	10.00	9.25	11.00
30 cu.yd. brick masonry with Portland cement mortar	30.00	22.80	30.00
2500 long tons rip rap, in place	4.50	4.95	3.00
18 in. c.i. pipes ands pecials, 4—18-in. valves, 1—24-in. chuck valve, 1—18-in. Venturi meter, etc (lump sum)	4,500.00	3,540.00	3,000.00
20,000 lin.ft. timber piles, in place	0.65	0.66	0.60
70,000 lb. steel for reinforcement, floor frames, etc., in place	0.075	0.114	0.07
300 sq.yd. broken stone road surfacing, complete	1.50	1.55	2.50
Ventilating ducts and drains, complete (lump sum)	550.00	545.00	500.00
Tide gates, for openings, 30 x 30 in., one set of two gates, complete and in place (lump sum)	200.00	738.00	800.00
Extended totals	$93,675.00	$93,915.00	$96,720.00

FLOOD-PREVENTION PROJECT, LEBANON, PENN.

Bids were received by the Mayor and Council for flood-prevention work (Contract No. 2), from (A) Mangan, Pugh & Dolan, Gregory Bldg., Pottsville; (B) Frank Cannon, 522 Tilghman St., Allentown; (C) Ensign & Co., Hbg. Bk. Bl., Harrisburg. The unit bids were as follows:

	(A)	(B)	(C)
Pumpin g(lump sum)	$2,560.00	$9,000.00	$2,000.00
13,000 cu.yd. trench excv. earth	1.50	1.40	1.50
1,800 cu.yd. trench excv. rock	4.00	3.00	3.18
10,000 cu.yd. backfill	.40	.60	.37
1,200 cu.yd. channel excav. A	1.75	3.00	1.91
650 cu.yd. channel excav. B	2.00	4.50	2.12
2,200 cu.yd. channel excav. C	1.25	1.80	1.59
24,000 lb. reinforcement	.10	.09	.09
200 lb. structural steel	.10	.10	.13
200 lb. iron castings	.05	.10	.16
10 cu.yd. 1st class concrete	15.00	13.50	16.96
650 cu.yd. 2nd class concrete	13.50	13.00	12.90
80 cu.yd. 3rd class concrete	11.00	8.50	11.66
1,600 lin.ft. 6-in. vitrified pipe	.25	.33	.65
1,000 lin.ft. 8-in. vitrified pipe	.40	.50	1.00
50 lin.ft. 10-in. vitrified pipe	.57	.75	1.00
460 lin.ft. 12-in. vitrified pipe	.72	90	1.10
550 lin.ft. 15-in. vitrified pipe	.94	1.20	1.40
50 lin.ft. 18-in. vitrified pipe	1.27	1.75	1.50
460 lin.ft. laying 24-in. concrete pipe	.64	.57	1.50
460 lin.ft. laying 27-in. concrete pipe	.70	.62	1.50
220 lin.ft. laying 30-in. concrete pipe	.80	.68	1.60
710 lin.ft. laying 33-in. concrete pipe	.86	.75	2.10
1,042 lin.ft. laying 36-in. concrete pipe	1.02	.81	2.10
3,035 lin.ft. laying 39-in. concrete pipe	1.04	.87	2.10
1,290 lin.ft. laying 42-in. concrete pipe	1.09	.93	2.10
1,350 lin.ft. laying 45-in. concrete pipe	1.15	1.00	3.00
3 each manholes "A"	50.00	50.00	95.40
8 each, manholes "B"	45.00	45.00	50.10
26 each, catch basins	100.00	60.00	84.80
2 each, curb inlets	35.00	40.00	63.60
13 each, corner inlets	30.00	50.00	63.60
2 each, alley inlets	150.00	80.00	53.00
9 each, sanitary manholes	75.00	60.00	42.40
6 each, flush tanks	25.00	90.00	318.00
15 each, lamp-holes	8.00	20.00	12.72
100 sq.yd. street crossings	.50	3.00	2.65
100 sq.yd. repair bitulithic	3.00	5.00	2.65
120 sq.yd. repair wood block	3.50	3.00	3.71
1,000 lin.ft. relaying house conn	15	.40	.16
Totals	$67,641.04	$75,977.67	$79,349.50

BUILDING OPERATIONS FOR JULY.

Following is a list of contracts awarded, published by the F. W. Dodge Co. for New England, New York, New Jersey, Pennsylvania, Maryland, Delaware, District of Columbia, Virginia, Ohio, West Virginia, Illinois, Indiana, Iowa, Wisconsin, Michigan, Minnesota, North and South Dakota, and portions of Missouri and Eastern Kansas from January 1 to August 1.

January 1 to August 1, 1917	$990,602,000
January 1 to August 1, 1916	711,005,246
January 1 to August 1, 1915	508,233,600
January 1 to August 1, 1914	454,579,300
January 1 to August 1, 1913	545,067,500
January 1 to August 1, 1912	482,577,500
January 1 to August 1, 1911	477,227,313
January 1 to August 1, 1910	526,425,460

NEW YORK AND NORTHERN NEW JERSEY

January 1 to August 1, 1917	$186,830,000
January 1 to August 1, 1916	104,137,500
January 1 to August 1, 1915	87,661,000
January 1 to August 1, 1914	76,413,500
January 1 to August 1, 1913	181,254,500
January 1 to August 1, 1912	146,625,500
January 1 to August 1 1911	143,380,500
January 1 to August 1, 1910	165,524,500

Contracts for the larger territories covered for July amounted to $159,200,000 against $206,541,000 for June and $157,563,000 for May. For the smaller territory of New York and Northern New Jersey contracts for July amounted to $31,549,000 against $27,387,000 for June, and $32,419,000 for May. This shows very little change for the past three months.

STATE APPROPRIATION FOR COUNTY ROAD WORK IN WEST VIRGINIA

Following is a list of the counties and their apportionment of the $435,860 which is available as given out by the state roads commission for the construction and maintenance of class A roads.

County	Mileage	Apportionment
Barbour	85	$8,075.00
Berkeley	69	6,555.00
Boone	94	8,930.00
Braxton	84	7,980.00
Brooke	32	3,040.00
Cabell	65	6,175.00
Calhoun	62	5,890.00
Clay	82	7,790.00
Doddridge	57	5,415.00
Fayette	85	8,075.00
Gilmer	74	7,030.00
Grant	80	7,600.00
Greenbrier	120	11,400.00
Hampshire	115	10,925.00
Hancock	45	4,275.00
Hardy	75	7,125.00
Harrison	110	10,450.00
Jackson	107	10,165.00
Jefferson	60	5,700.00
Kanawha	128	12,160.00
Lewis	73	6,935.00
Lincoln	104	9,880.00
Logan	83	7,885.00
Marion	69	6,555.00
Marshall	89	8,455.00
Mason	87	8,265.00
Mercer	96	9,120.00
Mineral	85	8,075.00
Mingo	85	8,075.00
Monongalia	97	9,215.00
Monroe	75	7,125.00
Morgan	70	6,650.00
McDowell	85	8,075.00
Nicholas	92	8,740.00
Ohio	42	3,990.00
Pendleton	95	9,025.00
Pleasants	42	3,990.00
Pocahontas	127	12,065.00
Preston	112	10,640.00
Putnam	75	7,125.00
Raleigh	83	7,885.00
Randolph	125	11,875.00
Ritchie	113	10,735.00
Roane	85	8,075.00
Summers	71	6,745.00
Taylor	49	4,655.00
Tucker	77	7,315.00
Tyler	70	6,650.00
Upshur	50	4,750.00
Wayne	94	8,930.00
Webster	100	9,500.00
Wetzel	91	8,645.00
Wirt	58	5,510.00
Wood	109	10,355.00
Wyoming	98	9,310.00

An Indication of the speed with which materials are being moved is contained in a report from the cantonment at Louisville, Ky. Administration buildings there were built from lumber cut in a Mississippi pine forest the week before. The trees were felled on Saturday, kiln-dried on Sunday, loaded on freight cars on Monday, and delivered at the Louisville site on Wednesday morning. An army of energetic carpenters completed the transformation from forest to Government building just one week from the day the trees had been felled.

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until Sept. 4, 1917.

Duboistown Bridge

Duboistown, Pa.

Sealed proposals for the construction of a reinforced concrete bridge over the West Branch of the Susquehanna River between the foot of Arch Street in West Williamsport and the foot of what will be High Street in the Borough of Duboistown, Pennsylvania, will be received by the Board of Commissioners of Lycoming County, Pennsylvania, at the office of their Chief Clerk, until 12 o'clock, noon, on September 4th, 1917. At the same place, the proposals will be publicly opened at 2 o'clock P. M.

The bridge as contemplated, will be about 1500 feet long and will consist of thirteen (13) open spandrel arches, of ninety-eight (98) feet clear span.

Prospective bidders may secure copies of the plans and specifications, including form of proposals, from L. O. Bower, Chief Clerk of the County Commissioners, at his office in the Court House, Williamsport, Pennsylvania, by making a deposit of twenty-five ($25.00) dollars, which sum will be refunded to all bidders upon return of plans and specifications in good order, and to all other contractors returning same before date on which bids are received.

A certified check for the sum of ten thousand ($10,000.00) dollars payable to H. B. Achenbach, Treasurer of Lycoming County, must accompany each proposal, both of which must be enclosed in a sealed envelope and marked, "Proposal for the Construction of the Duboistown Bridge" and must be delivered to L. O. Bower, Chief Clerk, County Commissioners' Office, Court House, Williamsport, Pennsylvania.

The right is reserved by the Commissioners to reject any and all bids, or to accept any bid they may deem to the best interests of the County.

Attest:
L. O. BOWER, Chief Clerk.
CHARLES W. MYERS,
JOSEPH H. NICELY,
JOHN G. DURRWACHTER,
County Commissioners.
M. C. KRAUSE, Engineer,
335 Pine Street, Williamsport, Pa.

Bids received until September 4, 1917.

Sewer Construction

Highland Park, N. J.

Sealed bids for the construction of sewers will be received by the Council of the Borough of Highland Park, N. J., at a meeting to be held at the School House, corner Second Ave. and Benner St. in said borough, September 4, 1917, at 8 P. M.

Proposals must be on blanks to be furnished by John T. Hopkins, Borough Engineer, No. 51 Paterson St., New Brunswick, N. J., from whom specifications and full particulars may be procured.

Council reserves the right to reject any or all bids.
ROBERT B. CRAIG,
Borough Clerk.

PROPOSALS FOR BACK FILLING.—U. S. Engineer Office, Detroit, Mich.—Sealed proposals for backfilling walls of Fourth lock, St. Marys Falls Canal, Michigan, will be received here until 11 a.m. Eastern time, September 4, 1917, and then opened. Information on application.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a. m. for issue mailed the next day

PROPOSALS

Bids received until September 4, 1917.

State Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT,
Harrisburg, Pa.

Sealed proposals will be received at said office until 10 a. m., September 4, 1917, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of 6513 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Washington Township, Fayette County, Route No. 247; 1,270 linear feet of Vitrified Block Pavement, 26 feet wide, situated in Swatara Township, Dauphin County, State-aid Application No. 570; 13,007 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Manor Township, Armstrong County, State-aid Application No. 397; 5,800 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Clinton Township, Butler County, Bureau of Township Highways Authorization No. 319; 6,537 linear feet of reinforced Concrete Pavement, 16 feet wide, situated in Foster Township, McKean County, Route No. 96; 6,537 linear feet of Reinforced Concrete Pavement, 16 feet wide, situated in Moreland and Abington Townships, Montgomery County, State-aid Application No. 648; 9,878 linear feet of Vitrified Block Pavement, 16 feet wide, situated in East Taylor Township, 11,070 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Jackson and East Taylor Townships, and 11,975 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Jackson Township, all in Cambria County, Route No. 52; 16,852 linear feet of Vitrified Block and Reinforced Concrete Pavement, 16 feet wide, situated in South Fayette Township, Allegheny County, Route No. 108; 19,318 linear feet of Vitrified Block and Reinforced Concrete Pavement, 16 feet wide, situated in Cecil and North Strabane Townships, Washington County, Route No. 108; 5,900 linear feet of Reinforced Concrete and Vitrified Block Pavement, 16 feet wide, situated in East Bethlehem Township, Washington County, Route No. 268; 11,857 linear feet of Reinforced Concrete Pavement, 16 feet to 20½ feet wide, situated in Hanover Township, Lehigh County, Route No. 159, and 7,821 linear feet of Bituminous Pavement, 18 feet wide, situated in South Abington Township, Lackawanna County, Route No. 9; also, for the grading and drainage of 9,299 linear feet of roadbed, 24 feet to 26 feet in width, situated in Moon and Hopewell Townships, Beaver County, State-aid Applications Nos. 254 and 294. Plans and specifications may be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Full particulars and information on application to Frank B. Black, State Highway Commissioner.

PROPOSALS

Bids received until September 12, 1917.

Centrifugal Pumping Unit

Kansas City, Mo.

SEALED PROPOSALS will be received by the Purchasing Agent of Kansas City, Missouri, at the office of the Purchasing Agent, Second Floor City Hall, until two o'clock p. m. of September 12, 1917, for the designing, construction, delivery and erection of a steam turbine, reduction gear, centrifugal pumping unit of a capacity to pump continuously twenty (20) million U. S. gallons of water per twenty-four (24) hours, against a total combined head of three hundred and seventy (370) feet and a steam pressure of one hundred and sixty-five (165) pounds per square inch at throttle; together with all machinery, tools and appurtenances necessary; all in accordance with the plans and general specifications on file in the office of the Chief Engineer of the Water Department.

Each bidder shall deposit with the City Comptroller a certified check in the amount of Fifteen Hundred Dollars ($1500.00), payable to the City Comptroller of Kansas City, Missouri, and accompany his bid with the Comptroller's receipt therefor.

The certified check referred to in the Advertisment shall be submitted by each bidder as a guaranty that the bidder will, within ten (10) days after receiving the award of a contract, file with the City a satisfactory bond to the amount of Fifty Thousand Dollars ($50,000.00) and will execute the contract.

The Board of Fire and Water Commissioners does not bind itself to accept the lowest or any bid offered, and reserves the right to reject any and all bids and to waive any irregularity or informality in the bids.

(Signed) W. C. WEAVER,
Purchasing Agent.
BURTON LOWTHER,
Chief Engineer and Superintendent.

Bids received until August 28, 1917.

Concrete Bridge

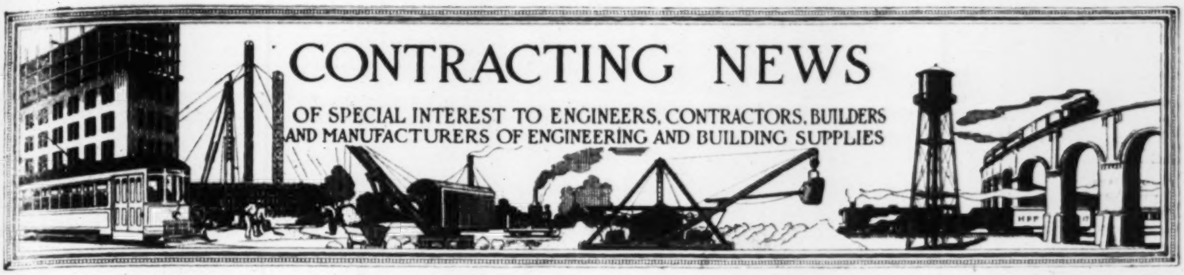
Channahon, Will County, Illinois.

Bids for construction of concrete pier and abutment, 250 cu. yds., straightening and erecting 83 foot truss span, placing wood floor on 83 foot span, and for 2500 cu. yds. of roadway embankment, will be received at Capitol Building, Springfield, Illinois, by the Department of Public Works and Buildings, State of Illinois, Division of Waterways, up to 12 o'clock noon of August 28, 1917, and will be opened at 2 o'clock P. M., of that date. Certified check for $500 will be required to accompany bids.

Plans and specifications can be seen at the office of the Department of Public Works and Buildings, State of Illinois, Capitol Building, Springfield, Illinois, or 905-130 North Fifth Avenue, Chicago; also at the Illinois and Michigan Canal office, Lockport, Illinois.

The department reserves the right to reject any or all bids.

DEPARTMENT OF PUBLIC WORKS
AND BUILDINGS.
LESLIE D PUTERBAUGH,
Director
WILLIAM L. SACKETT,
Superintendent of Waterways.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 52 to 55 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Sept. 3.	Burlingame, Kan.	Aug. 16
Sept. 4.	Hamilton, Ont.	Aug. 16
Sept. 4.	Cumberland, Md.	Aug. 9
	Adv. Aug. 9 to 23.	
Sept. 5.	Leola, S. D.	Aug. 30
Sept. 6.	Wolverton, Minn.	Aug. 23
Sept. 6.	Brockton, Mass.	Aug. 16
	Adv. Aug. 16.	
Sept. 6.	Thomson, Ill.	Aug. 16
	Adv. Aug. 16.	
Sept. 7.	Shawano, Wis.	Aug. 30
Sept. 10.	Cumberland, Md.	Aug. 16
	Adv. Aug. 16 to 30.	
Sept. 11.	New York, N. Y.	July 12
	Adv. July 12 to Aug. 23.	
Sept. 12.	Kansas City, Mo.	Aug. 23
	Adv. Aug. 23 and 30.	
Sept. 13.	Cleveland, O.	Aug. 30

SEWERS

Bids Close		See Eng. News-Record
Sept. 4.	Cumberland, Md.	Aug. 9
	Adv. Aug. 9 to 23.	
Sept. 4.	Rocky River, O.	Aug. 23
Sept. 4.	Dodge Center, Minn.	Aug. 23
Sept. 4.	Scranton, Pa.	Aug. 30
Sept. 5.	San Angelo, Tex.	Aug. 30
Sept. 5.	Seymour, Ia.	Aug. 30
Sept. 6.	Cleveland Heights, O.	Aug. 23
Sept. 7.	Avalon, N. J.	Aug. 30
Sept. 7.	Roselle, N. J.	Aug. 30
Sept. 15.	Hillsboro, Ill.	Aug. 16
Sept. 17.	Cleveland Heights, O.	Aug. 50

BRIDGES

Bids Close		See Eng. News-Record
Sept. 1.	Annapolis, Md.	Aug. 16
Sept. 3.	Sullivan, Ind.	Aug. 23
Sept. 4.	Marion, Ind.	Aug. 30
Sept. 4.	Brazil, Ind.	Aug. 23
Sept. 4.	Montgomery, Pa.	Aug. 23
	Adv. Aug. 16 to 30.	
Sept. 4.	Williamsport, Pa.	Aug. 16
	Adv. Aug. 16 to 30.	
Sept. 4.	Olympia, Wash.	Aug. 23
Sept. 4.	Bristol, Conn.	Aug. 30
Sept. 4.	Ritzville, Wash.	Aug. 30
Sept. 4.	Sudbury, Ont.	Aug. 30
Sept. 6.	Hiawatha, Kan.	Aug. 23
Sept. 6.	Duluth, Minn.	Aug. 23
Sept. 10.	Omaha, Neb.	Aug. 23
Sept. 10.	Akron, O.	Aug. 23
Sept. 10.	Bryan, O.	Aug. 30
Sept. 11.	Modesto, Cal.	Aug. 30
Sept. 11.	Bradentown, Fla.	Aug. 16
Sept. 13.	Excelsior Springs, Mo.	Aug. 30
Sept. 15.	Guthrie, Okla.	Aug. 30

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 3.	Greenfield, O.	Aug. 23
Sept. 3.	Indiana	Aug. 23
Sept. 4.	Canton, Ill.	Aug. 23
Sept. 4.	California	Aug. 23
Sept. 4.	Maryland	Aug. 23
Sept. 4.	Indiana	Aug. 23
	Adv. Aug. 23 and 30.	
Sept. 4.	Seattle, Wash.	Aug. 23
Sept. 4.	Pittsburgh, Pa.	Aug. 16
Sept. 4.	Columbus, O.	Aug. 16
Sept. 4.	New Brunswick, N. J.	Aug. 16
Sept. 4.	Pennsylvania	Aug. 23
	Adv. Aug. 23 and 30.	
Sept. 4.	Toms River, N. J.	Aug. 23
Sept. 4.	Linden, N. J.	Aug. 23
Sept. 4.	San Jose, Cal.	Aug. 30
Sept. 4.	Yazoo City, Miss.	Aug. 30
Sept. 4.	Cincinnati, O.	Aug. 30
Sept. 5.	Salem, Ore.	Aug. 30
Sept. 5.	Freehold, N. J.	Aug. 23
Sept. 5.	Indiana	Aug. 23
Sept. 5.	Ephrata, Wash.	Aug. 30
Sept. 5.	Paterson, N. J.	Aug. 30
Sept. 5.	Freehold, N. J.	Aug. 30
Sept. 5.	Butte, Mont.	Aug. 30
Sept. 6.	Indiana	Aug. 23
Sept. 6.	Muscatine, Ia.	Aug. 23
Sept. 6.	Ventura, Cal.	Aug. 30
Sept. 6.	Towson, Md.	Aug. 30
Sept. 6.	New York, N. Y.	Aug. 30
Sept. 7.	St. Louis, Mo.	Aug. 30
Sept. 7.	Indiana	Aug. 23
Sept. 7.	Avalon, N. J.	Aug. 30
Sept. 7.	Ohio	Aug. 30
Sept. 7.	St. Louis, Mo.	Aug. 30
Sept. 10.	Washington	Aug. 30
Sept. 10.	Wallace, Idaho	Aug. 30
Sept. 11.	Sacramento, Cal.	Aug. 30
Sept. 15.	Visalia, Cal.	Aug. 30
Sept. 19.	Seattle, Wash.	Aug. 23
Sept. 18.	Hohenwald, Tenn.	Aug. 23
Sept. 22.	Cameron, La.	Aug. 30

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Aug. 31.	Willmar, Minn.	Aug. 23
Sept. 4.	Estherville, Ia.	Aug. 30
Sept. 6.	Thomson, Ill.	Aug. 23
	Adv. Aug. 16 to 30.	
Sept. 8.	Madison, Minn.	Aug. 23
Sept. 8.	Trenton, Tenn.	Aug. 30
Sept. 10.	Walker, Minn.	Aug. 30
Sept. 12.	New Orleans, La.	Aug. 23
Sept. 12.	Hampton, Ia.	Aug. 30
Oct. 2.	St. Cloud, Minn.	Aug. 2

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Sept. 4.	Columbus, O.	Aug. 16

BUILDINGS

Bids Close		See Eng. News-Record
Sept. 4.	Lakewood, O.	Aug. 16
Sept. 4.	Detroit, Mich.	Aug. 23
Sept. 4.	Columbus, O.	Aug. 23
Sept. 4.	Waterbury, Conn.	Aug. 30
Sept. 4.	West Liberty, W. Va.	Aug. 30
Sept. 4.	Uniontown, Pa.	Aug. 30
Sept. 5.	Ironton, Ohio	Aug. 30
Sept. 5.	Englewood, N. J.	Aug. 23
Sept. 5.	Kent, O.	Aug. 23
Sept. 5.	Newton, Ia.	Aug. 16
Sept. 5.	Brooklyn, N. Y.	Aug. 16
Sept. 5.	Chester, Pa.	Aug. 30
Sept. 7.	Albany, N. Y.	Aug. 23
	Adv. Aug. 16 to 30.	
Sept. 10.	Bridgeport, Conn.	Aug. 30
Sept. 10.	Akron, O.	Aug. 30
Sept. 13.	Upper Sandusky, Ohio	Aug. 30
Sept. 15.	Oklahoma, Okla.	Aug. 16
Sept. 15.	Spirit Lake, Ia.	Aug. 9
Sept. 15.	Bathhurst, N. B.	Aug. 30

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Sept. 3.	El Cayey, P. R.	Aug. 30
Sept. 3.	Kuahua, T. H.	Aug. 9
Sept. 4.	McKees Rock, Pa.	Aug. 9
Sept. 4.	Detroit, Mich.	Aug. 9
	Adv. Aug. 16 to 30.	
Sept. 4.	Detroit, Mich.	Aug. 30
Sept. 4.	Washington, D. C.	Aug. 30
Sept. 4.	Vicksburg, Miss.	Aug. 30
	Adv. Aug. 30.	
Sept. 4.	New London, Conn.	Aug. 30
Sept. 5.	Torrington, Wyo.	July 26
	Adv. July 26.	
Sept. 5.	Washington, Ga.	Aug. 2
Sept. 5.	San Francisco, Cal.	Aug. 9
	Adv. Aug. 9 to 30.	
Sept. 5.	Washington, D. C.	Aug. 16
	Adv. Aug. 16.	
Sept. 6.	Forsyth, Ga.	Aug. 2
Sept. 10.	Annapolis, Md.	Aug. 30
Sept. 10.	Pearl Harbor, Hawaii	Aug. 30
Sept. 12.	Raton, N. M.	Aug. 23
Sept. 12.	Long Island City, N. Y.	Aug. 9
Sept. 18.	Cape Henry, Va.	Aug. 30
	Adv. Aug. 30.	
Sept. 21.	Kendallville, Ind.	Aug. 16
	Adv. Aug. 16 and 23.	
Sept. 25.	Washington, D. C.	Aug. 30
	Adv. Aug. 30.	
Oct. 1.	Twin Falls, Idaho	Aug. 30

MISCELLANEOUS

Bids Close		See Eng. News-Record
Sept. 4.	Levee Work—New Orleans, La.	Aug. 23
Sept. 4.	Dam—San Diego, Cal.	Aug. 23
Sept. 5.	Duct Line — Brooklyn, N. Y.	Aug 30
Sept. 5.	Shaft—New York, N. Y.	Aug. 23
Sept. 6.	Pumping Machinery—Brockton, Mass.	Aug. 23
	Adv. Aug. 9 to 30.	
Sept. 10.	Dam and Retaining Walls—Marshalltown, Ia.	Aug. 30
Sept. 10.	Retaining Wall—Lebanon, O.	Aug. 30
Sept. 10.	Dock—Georgetown, Wash.	Aug. 30

Where name of official is not given, inquiries should be addressed to City Clerk County Clerk or corresponding official

WATER-WORKS

Proposed Work

N. J., Bayonne—City plans to lay 12-in. water mains. About $20,000. W. P. Lea. clk.

N. C., Wilmington—City will issue $25,000 bonds to improve Water St. by extending water and sewer mains and curbing. W. E. Merritt, supt.

Miss., Hattiesburg—See "Sewers."

O., Akron—See "Streets and Roads."

O., Defiance — (Official) — City having plans prepared by W. J. Sherman Co., engrs. 613 The Nasby, Toledo, for water purification system. Noted Apr. 14.

O., Euclid—Town to sell $125,235 bonds, Sept. 24, to build water mains in various streets. H. Migner, city supt.

O., Hamilton—City had plans prepared to improve water-works system. About $16,130. D. W. Meade, Hamilton, engr. Noted Aug. 9.

O., Middleton—City plans to install water mains and sewers on portions East 2nd St. W. C. Morrison, city engr.

Mich., Flint—City election soon to vote on $128,000 bond issue for new pump and extension of water mains. W. L. Fisher, supt.

Mich., Ironwood—City voted to build water-works plant. F. R. Blackhurst, supt.

Ia., Atlantic—City had plans prepared building reservoir. About $20,000. J. H. Mayne, Atlantic, engr.

Ia., Conrad—(Official)—City rejected bids opened Aug. 28, to build sewage disposal plant and sanitary sewerage system.

Ia., Sioux City—City plans to improve water-works system. About $80,000. M. Lewis, supt.

Minn., Duluth—(Official)—City rejected bids installing 20,000-gal. centrifugal pump. Noted June 14.

Neb., Chappell—City voted $10,000 bonds to extend water-works. R. H. Libby, city supt.

Mont., Poplar—City plans to build water-works system. About $25,000.

Mont., Ronan—City to sell $16,800 bonds, Sept. 10, to build water-works system. Noted Aug. 16.

Water-Works (Continued)

Mont., Scobey—City defeated $19,000 bond issue to build water-works system. Noted Aug. 9.

Tex., Abilene—City voted $230,000 bonds to build $5,000,000-gal. reservoir on Elm Creek. Noted July 26.

Okla., Bristow—City voted $12,000 bonds to build waterworks and sewer extension. Noted Aug. 2.

Okla., Okmulgee—See "Sewers."

Okla., Poteau—City voted $75,000 bonds for new water-works; including pumping station and filtration plant. Benham Eng. Co., Colcord Bldg., Oklahoma, engrs. Noted July 26.

Okla., Waurika—City election, Sept. 11, to vote on $20,000 bond issue to improve water-works system. H. Treadwell, clk. Noted July 26.

Wash., Bremerton—City election Sept. 18 to vote on $60,000 bond issue to extend and improve water-works system.

Wash., Seattle—City to sell $3,700,000 bonds to develop Swan Lake, as an auxiliary storage basin, 3-mi. concrete tunnel and 3rd line from tunnel to city reservoir. L. B. Young, city supt.

Ore., Toledo—City voted $27,000 bonds to extend and improve water-works system.

BIDS DESIRED

O., Cleveland—(Official)—Until Sept. 13, by Comr. Purch. & Supplies, installing 84-in. venturi meters together with all necessary apparatus. R. Hoffman, city engr.

Wis., Shawano—Until Sept. 7, by D. E. Westcott, city clk., building extensions and additions to water-works system. About $40,000. P. Capraro, supt.

S. D., Leola—(Official)—Until Sept. 5, by Town Clk., building 50,000-gal. rein.-con. water-works reservoir. Dakota Eng. Co., Mitchell, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—City received low bid relaying water pipes in Hyde Park, Collins and Cleary Sq. from Drinkwater, 35 Hemlock St., West Roxbury.

★Va., Lynchburg—City let contract building filtration plant to Roberts Filter Mfg. Co., Darby, Pa. Noted June 7.

★O., Cleveland Heights—(Warrensville P. O.) See "Sewers."

★Wis., Madison—City let contract steam pipe fittings, valves, etc., for connections at new water-works pumping station to Hooper & Schmidt, Madison, $10,000. Noted Apr. 24.

★Kan., Wilburton—City let contract water-works improvements to McEachin & McEachin, McAlester, $26,310.

★Okla., Oklahoma—See "Sewers."

★Cal., Paso Robles—City let contract building water-works system involving 3000 ft. 8-in., 16,095 ft. 6-in. and 14,630 ft. 4-in. riveted steel pipe, 6040 ft. standard screw pipe and 52 2-way fire hydrants to M. Murphy, San Francisco, $37,248.

SEWERS

Proposed Work

N. Y., Buffalo—City Council authorized sewers in Zittel St., Frank Ave. and Indian Crescent. G. H. Norton, city engr.

N. Y., Rome—City having plans prepared for sewerage system in West Liberty St. J. Plunkett, city engr.

N. Y., Solvay—State Bd. Health, Albany, approved plans submitted by Semit-Solvay Co. for installing large disposal plant at Split Rock to eliminate pollution of Onondaga Lake by wastage from company's works.

N. J., Camden—City plans to build sewer portions Cope St. A. L. Sayers, st. comr. L. E. Farnham, city engr.

N. J., Hightstown—See "Streets and Roads."

Fla., Miami—City had plans prepared by B. H. Klyce, engr., building sewage-disposal system, including pump and filtration plant and canal. About $25,000.

Miss., Hattiesburg—City plans election to vote on $28,000 bonds to extend water and sewer mains. B. Jones, supt.

Ky., Shelbyville—City election, Nov. 6, to vote on $15,000 bond issue to build sewerage system.

O., Canton—City defeated $290,000 bond issue to build East and West intercepting sanitary sewer. W. E. Sarver, city engr. Noted July 26.

O., Cleveland—City plans to install sewers in Roanoke, East 100th, East 140th and East 135th Sts. R. Hoffman, city engr.

O., Middleton—See "Water-Works."

O., Wooster—City plans to build sewers in portions Maiden Lane, Callow Hill and Prospect St. H. W. Mowery, city engr.

O., Xenia—See "Streets and Roads."

Ind., Warsaw—City plans to build Phillipson sewer on North Dakota St.

Wis., Springfield—City plans to build new sewerage system. F. H. Clarke, city engr.

Wis., Superior—City plans to install sewer at Billing Park, between Pennsylvania and Wyoming Sts.

Minn., Caledonia—City lets contract about Sept. 15, sewerage system and disposal plant including 18,000 ft. of 8- to 18-in. vitr. clay tile sewer.

Tex., Texarkana—City election Sept. 17 to vote on $50,000 bond issue to build septic tank. C. E. Hayden, city engr.

Okla., Okmulgee—City defeated $145,000 bonds to extend sewers and $390,000 bonds to improve water-works system. Noted July 12.

N. M., Gallup—City having plans prepared by Burns & McDonnell, engrs., 400 Inter-State Bldg., Kansas City, Mo., building sewage disposal plant. R. G. Webb, city clk.

Cal., Newport Beach—City having plans prepared building sewerage system. C. Crego, city clk.

Ont., London—City having plans prepared for sewerage pumping plant at West London. About $50,000. H. Brazier, city engr.

BIDS DESIRED

N. Y., Brooklyn—Until Sept. 6, by L. H. Pounds, boro. pres., for sewers in Snediker Ave. and Newport St. About $13,484.

N. J., Avalon—Until Sept. 7, by Boro. Council, laying sewer pipe, 37th St. and 7th Ave., 6- and 8-in. terra cotta.

N. J., Roselle—Until Sept. 7, by Boro. Council, installing sewers, manholes, etc., in Monroe, Adelphia and Myrtle Sts. Noted July 26.

Pa., Scranton—(Official)—Until Sept. 4, W. G. Robertson, dir. dept. pub. wks., building pipe drain in portions 21st Ward. W. Schunk, supt.

La., Lafayette—(Official)—Until Sept. 25, by City, installing sanitary sewers and sewage-disposal plant; 10 mi. 8- to 20-in. pipe. J. B. McCrary Co., Atlanta, engrs. Noted May 31.

O., Cleveland Heights—(Warrensville P. O.)—Until Sept. 17, by H. H. Canfield, village clk., constructing sewers in Taylor-Caledonia Sewer Dist. No. 5, segment block and vitr. pipe storm and sanitary sewers. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ia., Seymour—(Official)—Until Sept. 5, (change of date) by J. Lowry, city clk., building 22,000-ft. of from 6- to 12-in. sewers and 2 disposal plants. M. G. Hall, Centerville, engr. Noted Aug. 16.

Mo., St. Louis—See "Streets and Roads."

Tex., San Angelo—(Official)—Until Sept. 5, by San Angelo Sewer Co., building sewage disposal plant. H. E. Elrod, Interurban Bldg., Dallas, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Reading—City let contract building section of 24-in. sewerage system to Rundler & Behm, Phila, $50,000.

★Md., Hagerstown—Sewerage Comn. let contract additions to sanitary sewerage system to H. C. Brooks Constr. Co., Martinsburg, W. Va., $111,778.

★O., Cincinnati—Bd. Control let contract installing sewer in Litherbury St. to Gradison Contsr. Co., $13,491.

★O., Cleveland Heights—(Warrensville P. O.)—Town let contract sewer and water connections in 15 districts to George Bros., 1448 Bolivar Rd., Cleveland, $34,430. Noted Aug. 23.

O., Lorain—City received low bid building portions 12th St. sewer, (a) brick, (b) segmental block, from Randall & Cooper, (a) $15,727, (b) $14,546; T. Trifiletti, (a) $17,017, (b) $12,855.

★O., Medina—See "Streets and Roads."

★Ind., Muncie—(Official)—Bd. Pub. Wks. let contract building 5th St. sewer No. 3, and Elbright sewer No. 1 to W. M. Birch Co., Muncie. Noted Aug. 16.

Mich., Escanaba—(Official)—City received low bids building sewers Stephenson Dist. C. Puissant, $8505; Wells, Cochrane, and Jennie Sts., Delto Constr. Co., $15,030; Selden Ave., G. Hogan, $5,32. Contractors all of Escanaba. Noted Aug. 9.

★Wis., Racine—Bd. Pub. Wks. let contract building storm sewers in various streets to C. E. Reed, Racine, $50,000.

★Ia., Marshalltown—(Official)—City let contract building sanitary sewers in portions of 12 streets to Anderson & Empire, Marshalltown, $20,000. Noted Aug. 16.

★Okla., Oklahoma—South Oklahoma Townsite Co. let contract sewerage and water-works systems to A. F. Binns, 225½ West Grand Ave., $18,000.

★Utah, Ogden—City let contract building sewer portions Washington Ave. to Heuser-Packard Co., Salt Lake City, $12,000. Noted June 28.

★Cal., Santa Barbara—See "Streets and Roads."

Ont., Toronto—Bd. Control received low bids Rosedale Creek sewer from high level pumping station to Russell Hill Rd. and Clarendon Ave. from A. McDonald and P. Nicholson. About $105,000. Noted Aug. 2.

BRIDGES

Proposed Work

N. Y., Rochester—City, New York State Rys. and New York Central & Hudson River R.R. plan new bridge over tracks of New York Central on Main St., E. F. T. Elwood, city engr. E. J. Cook, Rochester, genl. mgr. of former railway, and G. W. Kittredge, Grand Central Terminal, New York City, ch. engr. of latter.

Pa., Dubois—See "Streets and Roads."

Pa., Harrisburg—Comrs. Dauphin Co. plan bridge over tracks of Pennsylvania R.R. north of Middletown. About $45,000.

Ill., St. Joseph—Champaign Co. plans new bridge over channel, 110 ft. long and 18 ft. wide. G. C. Fairclo, co. supt. highways.

Wis., Wausau—Citizens voted $60,000 bonds to build rein.-con. bridge over Wisconsin River at Big Bull Falls. D. B. Luten, Indianapolis, engr. Noted June 28.

Minn., Walker—Comrs. Cass Co. will build bridge over narrows between Cass Lake and Pike Bay. About $20,000.

Kan., Cottonwood Falls—Chase Co. had plans prepared for 9 bridges. About $16,530. J. Frew, co. engr.

Kan., Topeka—Shawnee Co. will build 140-ft. rainbow arch bridge over Soldier Creek on Kansas Ave. About $25,000. Marsh Eng. Co., 205 Masonic Temple, Des Moines, engrs.

Neb., Lincoln—(Official)—Lancaster Co. will build 8 bridges with state-aid. Contracts to be let in October. About $218,000. G. E. Johnson, state highway engr.

Neb., Papillon—Sarpy Co. voted $50,000 bond issue to build bridges.

Wash., Bellingham—Comrs. Whatcom Co. will build steel bridge over Noosack River at Marietta. About $32,000.

Wash., Spokane—Council plans rein.-con. bridge over Hangman Creek at West Riverdale. About $25,000. M. Macartney, city engr.

Cal., Oakland—Alameda Co. voted $900,000 bonds as its share of bascule bridge over estuary between Oakland and Alameda; bridge to be built by county and Southern Pacific Co. Noted June 28.

Cal., Woodland—Bd. Superv. Yolo Co. authorized construction 4 bridges; 1 over Cache Creek, Stephens Bridge, 1 near Dunnigam Highway and 1 to replace Scott Bridge, all to rein.-con. About $43,000.

Ont., Kincardine—Council plans to repair bridges recently damaged by storm. About $12,000. R. M. McDowell, Owen Sound engr.

BIDS DESIRED

Conn., Bristol—Until Sept. 4, by T. B. Steele, city clk., rein.-con. bridge over Pequabuck River. C. W. Buell, city engr.

O., Bryan—Until Sept. 10, by G. C. Beucler, aud. Williams Co., for 8 bridges in various townships.

Ind., Marion—Until Sept. 4, by Comrs. Grant Co., for rein.-con. bridge over Mississinewa River. Contract recently awarded to F. R. Hoover rescinded. Noted July 26.

Bridges (Continued)

Mo., Excelsior Springs—Until Sept. 13, by W. L. Silvers, city clk., bridge over Henrie Ave. and 1 over Fishing Creek.

Okla., Guthrie—Until Sept. 25, by Comrs. Logan Co., for 19 bridges. About $33,000. A. A. Leer, clk.

Wash., Ritzville—Until Sept. 4, by Comrs. Adams Co., 65-ft. rein.-con. arch bridge.

Cal., Modesto—Until Sept. 11, by Stanislaus Co., for rein.-con. bridge on Oakdale-Waterford Rd.

Cal., Yreka—Until Sept. 4, by Siskiyou Co., 1 40-ft. and 1 80-ft. rein.-con. bridge, also 2 20-ft. spans, 1 32-ft. approach fill and rebuilding floor system of 70-ft. steel bridge.

Ont., Sudbury—Until Sept. 4, by W. J. Ross, town clk., for rein.-con. bridge.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Hampton**—E. S. Douglass, supt. highways, let contract rein.-con. arch bridge over Poultney River to Falkill Constr. Co., 1 Washington St., Poughkeepsie. Noted Aug. 16.

★**N. J., Trenton**—Bd. Freeholders Mercer Co. let contract double-arch culvert on River Rd. at Moore Sta. to R. A. Montgomery, Trenton, about $15,164.

★**Pa., Birdsboro**—Philadelphia & Reading Ry. let contract building bridge, Wilmington Branch, to Bennett & Randall, Lebanon, $15,000.

★**Pa., Kittanning**—Comrs. Armstrong and Westmoreland Cos. let contract repairs and replacements on Kiskiminetas River bridges at Vandergrift and Leechburgh, to Faris Engr. Co., Empire Bldg., Pittsburgh, about $56,265.

★**Fla., Ft. Myers**—Comrs. Lee Co. let contract 89 concrete bridges and culverts in connection with road work to Trapp & Fraser, Ft. Myers.

★**Fla., Palm City**—Palm Beach Co. Comrs., West Palm Beach, let contract building bridge over Lucie River to C. T. Dalkans Constr. Co., $63,517. Noted June 14.

★**O., Barberton**—T. J. Davies, dir. pub. ser., let contract concrete and steel viaduct to be known as Tuscarawas Ave. viaduct to Hackendorn Constr. Co., 1134-6 Ind. Pythian Bldg., Indianapolis; $177,600. Noted Aug. 2.

O., Columbus—Comrs. Franklin Co. received low bid rein.-con. bridge over Olentangy River on Lane Ave. from E. Elford & Co., 104 North 3rd St., $153,814; 1 on 3rd Ave. from Marion Constr. Co., Marion, $156,579. Noted Aug. 16.

★**Wis., Milwaukee**—Milwaukee Co. let contract approaches for rebuilding Grand Ave. viaduct to John Ubbink, $25,590.

★**Ia., Anamosa**—Jones Co. let contract 7 16-ft. and 2 24-ft. I-beam bridges to W. Flaherty, Anamosa, about $20,400.

★**Minn., Duluth**—Duluth & Iron Range Ry. let contract bridge over Sucker River to A. T. Nelson, 5 East Superior St., $10,000.

★**Ark., Wynne**—City let contract steel drawbridge over St. Francis River to Larimer & Burget Bridge Co., Memphis, $33,560.

★**Okla., Muskogee**—Muskogee Co. let contract bridge over South Canadian River to Mid-Western Ditch Co., 610 New England Bldg., Kansas City, Mo., about $150,000.

★**Okla., Poteau**—Le Flore Co. let contract 2 steel bridges across Poteau River in Heavener Twp. to Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, Mo., $24,000.

★**Wash., Vancouver**—Clarke Co. let contract 1 90-ft. span and 1 72-ft. span bridge over Lewis River near Yacolt to Vancouver Contr. Co., Vancouver. Noted July 26.

Cal., Rio Vista—Bd. Superv. Sacramento Co., Sacramento, and Solano Co., Fairfield, received low bid bascule bridge over Sacramento River from Tibbitts-Pacific Co., 16 California St., San Francisco, $164,568. Noted July 26.

★**Cal., Sacramento**—Bd. Superv. Sacramento Co. let contract bridge over American River at Folsom City to Ross Constr. Co., Forum Bldg., about $74,940.

★**Cal., San Jose**—City let contract rein.-con. bridge over Guadalupe Creek on Willow St. to A. Mattson, San Bruno, $16,500.

★**Ont., Windsor**—Canadian Pacific Ry. let contract rein.-con. viaduct to Sherwood Constr. Co., Mail Bldg., Toronto, about $50,000.

STRUCTURAL STEEL WORK

Proposed Work

N. Y., Brooklyn—See "Industrial Works."
N. Y., Rochester—See "Bridges."
Pa., Harrisburg—See "Bridges."
O., Cleveland—See "Industrial Works."
Ill., St. Joseph—See "Bridges."
Minn., Walker—See "Bridges."
Kan., Cottonwood Falls—See "Bridges."
Kan., Topeka—See "Bridges."
Neb., Lincoln—See "Bridges."
Neb., Papillon—See "Bridges."
Wash., Bellingham—See "Bridges."
Cal., Oakland—See "Bridges."
Cal., Yreka—See "Bridges."
Ont., Kincardine—See "Bridges."

BIDS DESIRED

O., Bryan—See "Bridges."
Ind., Marion—See "Bridges."
Mo., Excelsior Springs—See "Bridges."
Okla., Guthrie—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. J., Trenton**—See "Bridges."
★**Pa., Kittanning**—See "Bridges."
★**Pa., Lansdowne**—See "Buildings."
★**Wis., Milwaukee**—See "Bridges."
★**Ia., Anamosa**—See "Bridges."
★**Minn., Duluth**—See "Bridges."
★**Okla., Muskogee**—See "Bridges."
★**Okla., Poteau**—See "Bridges."
★**Wash., Vancouver**—See "Bridges."
Cal., Rio Vista—See "Bridges."
★**Cal., Sacramento**—See "Bridges."

REINFORCED CONCRETE

Proposed Work

N. Y., Brooklyn—See "Industrial Works."
N. Y., Buffalo—See "Industrial Works."
N. J., Jersey City—See "Miscellaneous."
Va., Norfolk—See "Buildings."
W. Va., Huntington—See "Buildings."
O., Cleveland—See "Industrial Works."
O., Lakewood—See "Buildings."
Wis., Wausau—See "Bridges."
Tex., Mineral Wells—See "Water-Works."
Wash., Seattle—See "Water-Works."
Wash., Spokane—See "Bridges."
Cal., San Francisco—See "Buildings."
Cal., Woodland—See "Bridges."
Cal., Yreka—See "Bridges."

BIDS DESIRED

Conn., Bristol—See "Bridges."
O., Lebanon—See "Miscellaneous.'
Ind., Marion—See "Bridges."
Ia., Marshalltown—See "Miscellaneous."
S. D., Leola—See "Water-Works."
Wash., Ritzville—See "Bridges."
Cal., Modesto—See "Bridges."
Ont., Sudbury—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Cambridge**—See "Industrials."
★**N. Y., Poughkeepsie**—See "Bridges."
★**Pa., Lansdowne**—See "Buildings."
★**Fla., Ft. Myers**—See "Bridges."
★**O., Barberton**—See "Bridges."
O., Columbus—See "Bridges."
★**Ind., Indianapolis**—See "Industrial Works."
★**Cal., San Jose**—See "Bridges."
★**Ont., Windsor**—See "Bridges."

STREETS AND ROADS

Massachusetts—State Highway Comn., Boston, rejected bids building highway in Egremont and Sheffield. Noted Aug. 2.

R. I., Woonsocket—City plans to improve various streets. About $28,299. F. H. Nullo, city engr.

N. Y., Carthage—City voted $10,000 bond issue for brick paving on North Mechanic St. and macadam paving on Furnace St.

N. Y., Troy—(Official)—Rensselaer Co. sold $75,000 bonds to build roads. Noted Aug. 16.

N. J., Elizabeth—Union Co. Bd. Freeholders plan to pave north side Westfield Ave. J. L. Bauer, co. engr.

N. J., Hightstown—City Council plans improving South St. and extending sewerage system in Summit St.

N. J., Linden—Boro. Council soon receives bids paving road between here and Rahway. J. L. Bauer, Elizabeth, twp. engr.

N. J., Westfield—City Council plans $37,000 bond issue for sidewalk and road improvements. A. W. Vois, city engr.

Pa., Beaver Falls—City soon lets contract, grading 7th, 8th and 14th Aves., laying sidewalks on 3rd, 12th and 14th Aves. E. S. Donaldson, city engr.

Pa., Dubois—Council to issue $22,000 bonds to pave and repair streets. A. L. Bouton, city engr.

Pa., Dubois—City soon lets contract repaving Boulevard, tarvia, and South Franklin St.; also building bridge over Sandy Creek. J. D. Flink, Harrisburg, engr.

West Virginia—State Highway Comn., Charleston, plans road contruction in 55 counties. About $446,036.

W. Va., Parkersburg—(Official)—City receives bids about Sept. 18, paving, steel grading, and curbing on portions Ann, Charles, George, Spring, 29th, 22nd Sts., sand and gravel, 3-in. concrete base; Depot St., concrete. About $46,000. W. M. Hall, city engr. Noted Aug. 9.

N. C., Wilmington—See "Water-Works."

Ga., Columbus—Polk Co. voted $10,000 bonds to build roads.

Fla., Key West—Monroe Co. voted $100,000 bonds to build hard surfaced road from Key West to Stock Island. Noted Aug. 2.

Fla., Lake City—Columbia Co. plans to vote on $500,000 bond issue to hard surface roads.

Miss., Ellisville—Jones Co. sold $200,000 bonds to build 126 roads in county. Noted July 5.

Miss., Ellisville—Jones Co. Bd. Supvrs., Laurel, plan building roads in Beat 1, 2 and 3. About $100,000.

Miss., Hattiesburg—Bd. Supervs. Forrest Co. plan to build 2-mi. road from Rawis Springs to Lux, also road to Camp Shelby. About $30,000.

Tenn., Greeneville—Greene Co. Comrs. soon let contract road improvement. About $200,000. C. E. Coile, co. engr.

Tenn., Springfield—Robertson Co. Court sold $50,000 bonds to improve turnpikes. Noted Aug. 9.

O., Akron—City Council plans paving, grading, curbing, constructing sidewalks, sewer laterals and water service connection in Ido St. J. A. Gehres, city engr.

O., Bryan—Williams Co. sold $108,000 bonds for road improvements. Noted Aug. 9.

O., Cleveland—City to issue $200,000 bonds to repave Superior Ave. R. Hoffman, city engr.

O., East Cleveland—(Cleveland P. O.)—Town plans draining, curbing and paving Mannheim Ave., brick.

O., Findlay—City plans paving portion Baldwin Ave., brick; also oiling West St. for 1 year. W. K. Stringfellow, city engr.

O., Sandusky—Sandusky Co. will sell $32,000 bonds to improve roads. F. R. Smith, co. aud.

O., Xenia—(Official)—City election Nov. 13 to vote on $17,000 bond issue as city's share in $150,000 street improvement work. Work involves paving 10 streets, sanitary and storm water sewers. J. P. Shumaker, city engr. Noted Aug. 16.

Ind., New Albany—Floyd Co. sold $31,000 bonds to build roads. C. A. Sittason, co. treas.

Ill., Pittsfield—Pike Co. Comrs. plan to extend state road toward Griggsville. About $16,000.

Ill., Tuscola—Douglas Co. soon let contract building brick road south and west of Newman.

Wis., Madison—City plans to pave portion North, Russell and Helena Sts. and Yahara Pl. W. G. Kirchoffeffr, 22 North Carroll St., engr.

Ia., Davenport—Bd. Pub. Wks. plans grading streets. About $15,000. R. E. Sawistowsky, city engr.

Ia., Ottawa—La Salle Co. had plans prepared brick road Otter Creek Twp., 5300 ft., 15 ft. wide. About $24,934.

Ia., Sioux City—Woodbury Co. Comrs. plan to pave Sioux City-Correctionville Rd., 1 mi. concrete; also Sioux City-Smithland Rd. About $190,000.

Minn., Duluth—Pub. Wks. Comn. plans paving Railroad St. and building road under Garfield Ave. W. E. Ayres, city engr.

Minn., East Brainard—(Brainard P. O.)—City plans paving portions Main and 9th Sts.

Kansas—State Highway Comn., Topeka, plans to hard-surface Van Horn Rd. between Kansas City and Independence.

Kan., Oswego—Labette Co. had plans prepared improving 20 mi. permanent hard surface roads. About $60,000.

Neb., Nebraska City—(Official)—Otoe Co. rejected bids grading 20,000 cu.yd. road. Noted Aug. 9.

Streets and Roads (Continued)

Mont., Helena—City plans to pave portion 6th Ave., 5-in. base, brick or 6-in. rein-con. base. About $80,000. J. D. McLeod, city engr.

Mo., Albany—City Council plans paving portions Polk, North Hundley and East Clay Sts.

Mo., Alton—Oregon Co. Court plans opening Stikes Rd. and will survey proposed road from Howell Co. line to Thayer.

Mo., Caruthersville—Pemicott Co. plans $500,000 bond issue to improve roads.

Mo., Doniphan—Ripley Co. plans election Oct. 2 to vote on $200,000 bond issue to improve roads.

Mo., Nevada—Vernon Co. had plans prepared building road in Center Twp., sandstone base, 6 in. thick and 16 ft. wide with gravel surface 4 in. thick 16 ft. wide.. A. Wood, co. engr.

Mo., New London—Ralls Co. election Sept. 21 to vote on $250,000 bonds to improve roads.

Mo., New Madrid—New Madrid Co. voted $850,000 bonds to improve roads.

Mo., Oregon — Holt Co. plans $800,000 bond issue to improve roads.

Mo., Springfield—Greene Co. election soon to vote on $10,000 bond issue to build roads in Galloway Dist. L. Luster, atty.

Ark., Perryville—Perry Co. Road Improv. Dist. No. 1 sold $95,000 bonds to construct 26 mi. of road.

Texas—State Highway Comn., Austin, plans Tex-O-Kan road through several counties, involving grading, ditching, hard surfacing, clay, sand or gravel with clay binder and concrete culverts.

Tex., Corsicana—Comrs. Court of Navarro Co. plans election Sept. 13 in Rd. Dist. No. 1 to vote on $200,000 bond issue for good roads.

Tex., Corsicana—Comrs. Court of Navarro Co. plans election Sept. 15 in Richland Rd. Dist. to vote on $80,000 bond issue to build roads.

Tex., Dallas—County defeated $1,000,000 bond issue to construct permanent highways. Noted July 26.

Tex., Eastland—Eastland Co. defeated $130,000 bond issue for roads in Dist. No. 1. Noted July 26.

Tex., Greenville—Hunt Co., Rd. Dist. No. 2, voted $100,000 bond issue to build roads. Noted July 19.

Tex., Houston—Harris Co. will sell $1,100,000 bonds for building roads. Noted June 7.

Tex., Palestine—Comrs. Court Anderson Co. plan election Sept. 15 to vote on $20,000 bond issue for roads in Dist. No. 2.

Okla., Ada.—(Official)—Pontiac Co. sold $523,000 bonds to build roads and bridges. Noted Aug. 9.

Okla., Ada—City plans paving in Dist. No. 4, asphaltic concrete. About $50,000. Benham Eng. Co., 1300 Colcord Bldg., Oklahoma, engrs.

Okla., Anadarko—Latham Twp., Caddo Co., election soon to vote on $25,000 bonds to build roads.

Okla., Eufaula—McIntosh Co. voted $50,000 bond issue to improve roads. A. J. Wells, Canadian, co. clk.

Okla., Newkirk—City plans paving 30,000 yd. in business section. About $65,000. Benham Engr. Co., 1300 Colcord Bldg., Oklahoma, engrs.

Okla., Okmulgee—Okmulgee Co. having plans prepared by Harrington, Howard & Ash, engrs., Arear Leslie Bldg., Kansas City, Mo., for county road system.

Idaho, Grangeville—Idaho Co. election, Oct. 27, to vote on $100,000 bond issue to build Stites Clearwater Highway.

Idaho, Grangeville — Grangeville Highway Dist. defeated $15,000 bonds to build roads. Noted July 12.

Idaho, Mackay—Council passed ordinance building 20 blocks cement walks; 4 blocks to be 8 ft., remainder 5 ft. wide.

Idaho, St. Anthony—Council passed resolution building cement sidewalks on certain streets and avenues. About $20,000.

Idaho, Wallace—City rejected bids paving in Dist. No. 7. New bids. Noted Aug. 23.

Utah, Provo—Utah Co. Comrs. plan concrete highways throughout entire length of county. About $93,000.

Utah, Salt Lake City—Salt Lake Co. election soon to vote on $22,000 bonds to improve roads.

Ariz., Clifton—Greenlee Co. sold $200,000 bonds to build Clifton-Springerville Highway. Noted June 21.

Ariz., Holbrook—Navajo Co. Highway Comrs. sold $160,000 bonds to build roads. Noted May 31.

Wash., Bellingham—City Council passed resolution paving portion Army St., asphalt, 24 ft. wide, 6-in. concrete sidewalk on 1 side. About $30,000. C. Lindberg, city engr.

Wash., Seattle—City had plans prepared paving Wilson Ave., $253,630; portion Stoneway St., $15,856; East 50th St., $109,000. A. H. Dimock, city engr.

Wash., South Bend—Pacific Co. recently sold $275,000 bonds to improve roads. Noted Aug. 2.

Wash., Tacoma—Pierce Co. Comrs. plan election soon to vote on $1,000,000 bond issue to build scenic highway to American Lake Cantonment, Camp Lewis.

Oregon—State Highway Comn., Salem, plans to hardsurface road from Pendleton to Eastern Oregon State Hospital and to pave Kild Horse Rd., Pendelton to Blakely Station, 16 ft. wide.

Ore., Eugene—Lane Co. soon lets contract building portion North Fork Highway, to form a connecting link between Eugene and Florence. H. W. Libby, co. engr.

Ore., Pendelton—Council passed resolution paving portions Jackson and Madison Sts. About $25,000.

Cal., Corte Madra—City voted $50,000 bonds to build streets.

Cal., El Cajon—City plans election Sept. 25 to vote on $11,500 bond issue for paving state highway through town, concrete.

Cal., Santa Barbara—City having plans prepared improving Del Mar to Booth Point highway. About $15,000. A. B. Cook, city engr.

BIDS DESIRED

N. Y., New York—Until Sept. 6, by D. Mathewson, boro. pres., Bronx Boro., improving portions of Spofford, Rhinelander, Sackett, Webster and University Ave., East 138th, Buck and Purdy Sts., Boston Rd. and Butler Pl. by grading, curbing, paving and repaving, laying sidewalks and crosswalks, building inlets, drain, receiving basins and sewers.

N. J., Avalon—Until Sept. 7, by Borough Council, grading, graveling, curbing and cement sidewalks on 7th, 15th and 33rd Sts. and Wirst Ave. W. H. Collisson, Jr., Ocean City, boro. engr.

N. J., Freehold—Until Sept. 5, by Bd. Freeholders, Monmouth Co., reconstructing Tennent-Englishtown Rd., gravel surface on slag foundation, 1940 compacted cu.yd. C. E. Close, clk.

N. J., Paterson—Until Sept. 5, by Bd. Freeholders, Passaic Co., improving Midvale and Greenwood Lake Rd. to West Milford Twp. W. Botbly, clk.

N. J., Union—Until Sept. 4, by City Council, repaving and improving portions Gardner St. About $15,000. T. F. Bowe, city engr.

Md., Towson—Until Sept. 6, by Baltimore Co., building 1-mi. Falls Rd., concrete. H. J. Gallagher, clk.

Fla., Kissimmee—(Official)—Until Sept. 17, by J. L. Ocerstreet, clk., Osceola Co., building road from Kissimmee to Loughman, Dists. Nos. 1 and 2, brick. Noted July 12.

Miss., Yazoo City — Until Sept. 4, by Comrs. Yazoo Co., Dist. No. 1, improving roads involving 6.9-mi. grubbing 80,000 cu. yd. grading, installing 200 lin.ft. 12-in., 300 ft. 15-in., 200 ft. 18-in. and 150 ft. 24-in. culvert pipe, 13 cu.yd. plain and 392 cu.yd. rein.-con.

La., Cameron—(Official)—Until Sept. 22, by Cameron Co. Bd. Supers., Rd. Dist. No. 1, grading, bridging and metalling road in Hackberry, 5.5 mi. T. H. Mandell, Lake Charles, engr. Noted Aug. 9.

O., Cincinnati..Until Sept. 4, by C. F. Hornberger, dir. pub. ser., improving and paving portions Maple Leaf Ave. F. Krug, city engr.

O., Cleveland—Until Sept. 5 (change of date) by city grading, draining, curbing and paving portion East 141st St. R. Hoffman, city engr. Noted July 19.

Mont., Butte—(Official)—Until Sept. 5, by C. H. Tracy, city clk., repaving streets in Dist. No. 243, vitr. block or wood block, $21,901; No. 244, same material, $16,901; No. 245, bitulithic or asphaltic concrete, $8304; W. H. Ellis, city engr. Noted Aug. 16.

Mo., St. Louis—Until Sept. 7, by Bd. Pub. Ser., paving portions Varrellmann, Ethel, and Colorado Aves.; also building sewers in Glaise Creek Sewer Dist. No. 18. E. R. Kinsey, pres.

Idaho, Wallace—Until Sept. 10, by D. H. De Long, city clk., paving portions several streets, including concrete gutters. About $13,000.

Washington—Until Sept. 10, by State Highway Comn., Olympia, grading, draining and surfacing roads as follows: Stevens Co., State Rd. No. 22, 6 mi.; Clarke Co., Pacific Highway, 3.6 mi.; Kittias Co., Sunset Highway, 2 mi.; Columbia Co., Inland Empire Highway, 6 mi.; Walla Walla Co., Inland Empire Highway, 5½ mi.

Wash., Ephrata—Until Sept. 5, by Grant Co. Comrs., graveling 3½-mi. highway north of Coulee City.

Oregon—Until Sept. 5, by State Highway Comn., Salem, building 3 units Pacific Highway in Douglas Co.

California—(Official)—Until Sept. 11, by State Highway Comn., 515 Forum Bldg., Sacramento, grading state highway, in Humboldt Co., 7.2 mi. A. B. Fletcher, highway engr.

Cal., San Jose—Until Sept. 4, by Bd. Supervs. Santa Clara Co., improving Bodfish Mill Rd., Dist. No. 1; Santa Clara and Alviso Rd., Dist. No. 4. H. A. Pfister, co. clk.

Cal., Ventura—(Official)—Until Sept. 6, by Ventura Co., paving and grading Main St., 1.42 mi. concrete, 16 ft. wide, 4 in. thick; surfacing Telegraph and Nordhoff Rds., concrete, 1,193,000 sq.ft. J. B. McCloskey, clk.

Cal., Visalia—Until Sept. 15, by Bd. Superv., Tulare Co., paving 8 mi. road in Tulare-Paige Div., 8 mi. in Exeter-Merryman Div., 9 mi. in Dinuba-Kingsburg Div., concrete.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts—State Highway Comn. let contract building highway in Sagus, Malden and Melrose to Rowe Contg. Co., Malden, $30,494. Noted Aug. 16.

Massachusetts — State Highway Dept., Boston, received low bids paving section Fitchburg Highway, from R. E. Bull, Fitchburg, $22,313; R. F. Hudson, Melrose, $27,038; C. E. Horne, Millbury, $30,026; section Littleton Highway, J. C. Collins, Andover, $17,170; Framingham Constr. Co., Framingham, $19,970. Noted Aug. 16.

Mass., Boston — (Dorchester) — City received low bids paving Dorchester Ave. from B. E. Grant, 101 West Cedar St., $27,835; J. F. Lynch, 143 Tonawanda St., $32,629; West Roxbury Trap Rock Co., Grove and Centre St., West Roxbury, $32,958.

Mass., Malden—City received low bids. Aug. 16, paving 4200-sq.yd. granite block pavement on 6-in. concrete base, from Simpson Bros., 166 Devonshire St., Boston, $3.95 per yd. C. W. Dolloff & Co., 20 Central St., Boston, $4.45 per sq.yd.

N. Y., New York—R. C. Harris, comr. docks, Pier "A" Battery Pl., received low bids Contr. No. 1572, paving Marginal St. between 44th and West 47th St., granite block, concrete foundation, from J. J. B. La Marsh, Inc., 26 Court St., Brooklyn, $44,926; Rosentahl Eng. & Contr. Co., Inc., 145 Hooper St., Brooklyn, $45,936; M. J. O'Hara, New York, $46,656. Noted Aug. 16.

★N. J., Bayonne—City let contract paving West 39th St., asphalt, to T. S. Crichfield, 54 5th St., Hoboken, $25,000. Noted July 12.

N. J., Jersey City—Hudson Blvd. Comrs. received low bid resurfacing Hudson Blvd. between Central R.R. of New Jersey near 8th St. to 36th St., Bayonne, from C. T. Cavanaugh, 34 W. 55th St., Bayonne, $12,000. Noted Aug. 9.

★N. J., North Bergen — (Weehawken P. O.)—Hudson Co. Park Comn., Jersey City, let contract paving walks North Hudson Co. Park, bituminous concrete, to Clinton Constr. Co., 306 Charles St., West Hoboken, $70,500. Noted July 19.

★Pa., Brownsville—Town let contract paving, curbing and grading New Water St. to Crosson Co., Brownsville, $30,706. Noted Aug. 9.

★Pa., Dubois—City let contract repaving North Brady St. to T. Munro, Dubois. Noted July 12.

★Pa., Erie—City let contract paving East Ave., to Mayer Bros. Constr. Co., Commerce Bldg. About $16,230.

Pa., Phila.—Dept. Pub. Wks. received low bids paving League Island Park, 45,000 sq.yd. asphalt and 40,000 sq.yd. bituminous macadam, from E. H. Vare, Lincoln Bldg., $185,920; portions 10 streets, asphalt, Barbour Asphalt Co. and Phila. Paving and Constr. Co., 1345 Arch St., $49,100; portions Wolf, Wood and 18th Sts., wood block, Anderson & Snyder and E. C. Fish & Co.

Streets and Roads (Continued)

★Pa., Phila.—City let contract roadbed on Germantown Rd. and Willow Grove Pike to Ambler, Davis & Co., Denckla Bldg.

★Va., Staunton—(Official)—City let contract paving Middlebrook Ave. to W. Larner Co., Staunton, $10,000. Noted June 14.

★Tenn., Savannah—(Official)—Highway Comm. let contract building following roads in Hardin Co.: 8 mi. to Childus & Smith, Hamburg, $9500; 6 mi. to E. Begbie, Olmens Hill, $9500; 6 mi. to J. L. Ledbette, Right, $9000. Noted Aug. 2.

★Ky., Paducah—McCracken Co. let contract paving and improving roads to L. E. Figg, Louisville. About $200,000.

★O., Lancaster—(Official)—City let contract paving portion West Wheeling St. to Wilson & Beckler, Lancaster. About $20,338. Noted Aug. 16.

★O., Lima—City let contract paving portions High St., wood block, High, North West, Baxter, South West, North Sts. asphalt, to Andrews Asphalt Co., 1413 Holmes Bldg.; portions Buckeye, Baker, and Court Alleys, brick, to Summers & Hardin, 225 Holland St. Noted July 26.

★O., Medina—City let contract paving and grading Prospect, South Bway., Smith Rd. and North Court St., vitr. brick, concrete base; setting curbs, building storm sewers, culverts, drains and retaining walls to Buckeye Eng. Co., Norwich. Noted Aug. 2.

★O., Oxford—(Official)—Village let contract paving High St. to L. P. Meredith, Richmond, Ind. About $17,000. Noted Aug. 16.

★O., Sand Springs—City let contract paving 30,000 yd. asphaltic concrete in Dist. No. 2, to F. P. McCormick, St. Louis, Mo. About $79,300. Noted Aug. 9.

★O., Toledo—City let contract repaving Stickney Ave. to Russell & Jennison Co., $63,224; Oak St. and car tracks to H. P. Streicher Co., Terminal Bldg., $56,302 and $36,797 respectively; improving Valleywood Dr. to Asphalt Block Paving Co., 842 Ohio Bldg., $8995. Noted June 14.

Ind., Huntington — (Official) — Bd. Co. Comrs., Huntington Co., let contract gravel road to S. H. Palmer, R. R. No. 5, Huntington. About $17,000. Noted July 26.

Ind., Indianapolis—Bd. Pub. Wks. received low bid paving streets (a) asphalt, (b) bituminous concrete, as follows: 43rd St., Republic Constr. Co., 1614 Merchants Bank Bldg., (a) $4.35, (b) $4; Union Asphalt Constr. Co., 308 Amer. Central Life Bldg., $5.03, (b) $4.67; American Constr. Co., 108 North Delaware St., (a) $5.22. Noted Aug. 9.

★Ind., South Bend—(Official)—City let contract paving Miami St. to Western Constr. Co., Phœnix Bldg., Iowa City, Ia., Eddy St. and Mishawaska Ave., sheet asphalt, to A. H. White Co., 1600 Railway Exchange Bldg., Milwaukee, Wis., $184,500. Noted Aug. 23.

Mich., Escanaba—Town received low bids paving portions Stephenson Ave. (a) crushed stone, (b) bitulithic, from General Contr. Co., 1254 Plymouth Blvd., (a) $2, (b) $1.69; C. Hall & Co., Duluth, (a) $2.10, (b) $1.73. Noted Aug. 16.

★Illinois—State Highway Dept., Springfield, let contract paving Grandview Rd. to A. J. Parrish, Paris, $16,389.

★Ill., Danville—(Official)—Bd. Local Improv. let contract paving portion Robinson St. to J. C. Poel, Danville, $11,355. Noted Aug. 9.

★Ill., Hillsboro—City let contract paving Hamilton, Brailey, Springfield Rd. and Water St. to Sell & Koeller, 517 Millilin Bldg., Peoria. Noted Aug. 23.

★Ill., Jacksonville—City let contract paving in loop district, creosoted wood block, to J. E. Bretz, 224 Zast Union St., Springfield, $34,454. Noted Aug. 9.

★Ill., Pontiac—(Official)—City let contract paving Hazel and Cross Sts. to R. Lobb & Son, Pontiac, $42,500. Noted Aug. 9.

★Wis., Oconto—City Council let contract 28,000 sq.yd. asphalt paving, curbing and guttering to White Constr. Co., 1600 Ry. Ex. Bldg., Milwaukee. About $62,000.

★Wis., Racine—City let contract paving portions West Prospect St., asphalt, to Western Improv. Co., 840 Racine St., $2.18 per sq.yd., curb and gutter, 72c.

★Ia., Burlington — (Official) — City let contract paving 1-mi. Bluff Rd. to Kael Hucke, Burlington, $11,016; portion Main St. to Burlington Constr. Co., Burlington, $2.09 per sq.yd. Noted Aug. 16.

Ia., Des Moines—City received low bids paving Beaver Ave., (a) brick with monolithic filler, (b) brick with bituminous filler, (c) concrete from C. W. Wagner Co., Union Station (a) $256,330, (b) $262,435, (c) $230,077; Akin & Slutter, Corning, (a) $225,892, (b) $238,092, (c) $199,936; S. J. Krage Sioux City, (c) $157,741.

★Ia., Rock Island—Rock Island Bd. Local Improvs. let contract paving portion 6th Ave., asphaltic concrete and building boulevard on same to McCarthy Improv. Co., 220½ Main St., Davenport, $2.05 per yd., concrete curb and gutter, $0.65, excava., $1.40, curbing, $0.43.

★Miss., Bemidji—Betrami Co. Comrs. let contract grading and paving Jefferson Highway to Leet Bros. About $11,232.

★Minn., Duluth—Bd. Pub. Ser. let contract improving portion Faribault St. to A. A. Bodin & Sons. About $10,000. Noted June 14.

★Kan., Great Bend—City let contract asphaltic concrete paving to M. R. Ammerman, Salina, $40,000. Noted Aug. 9.

Neb., Central City—City let contract paving Dist. No. 1, Trinidad asphalt, to E. D. Tyner Constr. Co., Central City, $1.84 per sq.yd.

★Mont., Billings—(Official)—City let contract paving 7360 sq.yd. in Dist. No. 157 to Warren Constr. Co., Billings. About $20,818. Noted Aug. 9.

★Mo., Caruthersville—(Official)—City let contract paving portions West 6th St., tarvia filled macadam with concrete curbs and gutters to J. H. Hinerman Co., Springfield, $89,000. Noted July 26.

★Mo., Sedalia—Sedalia Twelve Mi. Special Rd. Dist., Pettis Co., let contract graveling roads to Wm. Imhauser, 82c.

★Okla., Bristow—City let contract paving to Park-Moran Paving Co., Okmulgee. About $10,947.

★Okla., Sapulpa—City let contract paving 27 blocks to Parker Washington Co., Oklahoma, $84,000.

★N. M., East Las Vegas—City let contract building bitulithic pavement on several streets to Morton Bros. About $80,000.

★Idaho, Lewiston—Nez Perce Co. Comrs., Lapwai Valley Highway Dist., let contract grading lateral highway from Sweetwater to Webb Ridge, 5 mi., to H. Kester, Lewiston.

★Idaho, Lewiston—City received low bids paving Dist. No. 11, from C. M. Payne, 724 East Mission St., Spokane, $25,541; Dole & Son, Lewiston, $25,829. Noted May 24.

★Idaho, Wallace—City let contract paving Improv. Dists. Nos. 6 and 8, 15, 754 sq.yd., 2-in. bitulithic surface, 3-in. macadam base, to H. J. Kaiser, 312 Colby Bldg., Everett, Wash., $1.52 per yd. Noted Aug. 23.

★Wash., Mt. Vernon—Skagit Co. Comrs. let contractpaving Cook Rd., one course concrete, to Grant & Ervig, Everett. About $59,105. Noted Aug. 16.

★Wash., Seattle—(Official)—King Co. Comrs. let contract Kirkland-Houghton Rd. to Moraine Gravel Co., 304 Ry. Ex. Bldg. About $11,700. Noted Aug. 9.

★Wash., Seattle—Bd. Pub. Wks. let contract paving Roy St. to James Constr. Co., 812 2nd Ave., N., $42,508. Noted Aug. 23.

★Wash., Tacoma—City let contract paving portion Pacific Ave. to Independent Paving Co., 2601 Railroad Ave., Seattle, $12,065. Noted June 28.

Cal., Las Angeles—City received low bid paving in Rd. Improv. Dist. No. 1, concrete, bituminous surface, from J. S. Miller, $16,850; E. S. Groshong, $17,000; Holland Constr., $18,217. Contractors all of Los Angeles.

★Cal., Redding—Conners, Green & Co., Eureka, have sub-let contract concrete work on 11 mi. state highway to A. Anderson, Redding. Noted June 21.

Cal., Sacramento—City received low bid building Riverside Rd. from Contra Costa Constr. Co., 2323 Shattuck St., Berkeley, $24,328; Plymouth Rd. from L. S. Atkinson, 610 South Bway., Los Angeles, $19,953.

★Cal., San Diego—City let contract paving Sect. 1, Linda Vista Rd. to army cantonment to J. Engebretsen, 614 5th St., $53,993. Rooney-Wyckoff Co., formerly awarded contract withdrew its bid. Noted Aug. 9.

★Cal., San Jose—Santa Clara Co. let contract improving Lucretia and Fair Aves. to F. Wehner, 1041 South 1st St., $7285; Senter Rd., J. F. Adams, 621 Home St., $3585; Montague Rd. to Raisch Improv. Co., Crocker Bldg., San Francisco, $16,770. Noted June 21.

★Cal., Santa Barbara—City let contract paving portions Bath St., warrenite, constructing cement and stone curbs, gutters, vitr. pipe sewers and storm drains, to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles. About $61,043. Noted Aug. 9.

Cal., Taft—City received low bids Warrenite paving and constructing cement curbs and sidewalks on all streets, from Federal Constr. Co., Fresno. About $167,115.

Cal., Tulare—City received low bids paving 2.3 mi. streets, concrete, from W. A. Kettlewell & Sons, Kingsburg. About $39,000. Noted July 12.

Cal., Viscalia—Tulare Co. received low bid paving 2.3 mi. streets connecting county and state highway from W. A. Kettlewell & Sons, Kingsburg, $39,000.

★N. S., Glasgow—City let contract 6200 sq.yd. bitulithic pavement to Warren Bituminous Paving Co. of Ontario, Ltd., Toronto. About $15,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Georgia—N. P. Pratt, 88 Auburn Ave., Atlanta, and associates plan to build railway from Clermont to property of Pyrites & Chemical Corp. on Chestatee River, 9 mi.

Ohio—Toledo Ry. & Light Co., Toledo, will double-track Dorr St. Line in connection with paving to be done by city. About $90,000. J. M. Enright, Toledo, mgr. rys.

Iowa—Chicago, Rock Island & Pacific R.R. will improve right-of-way between Cedar Rapids and West Liberty relaying 80-lb. rails over 40 mi. of main line with 100-lb. rails; about $100,003. Company also plans to improve line between Vinton and Manly; $175,000. C. A. Morse, Chicago, ch. engr.

Colorado—William V. Shenk, Globe, Ariz., represents syndicate which proposes to build electric railway from southwestern part of Colorado through Arizona and northern Mexico extending to Gulf of California. Project includes huge dam on Colorado River 60 mi. from Arizona-Utah line, 200,000-hp. hydro-electric plant and port on gulf. Preliminary work will cost about $500,000 and entire project $50,000,000.

New Mexico—H. M. Gray, Las Cruces, and associates, plan interurban electric railway between Las Cruces and El Paso, Tex., about 44 mi., to run through irrigated portion of Rio Grande Valley.

Arizona—Southern Pacific Co. will double-track line from Stockham 3 mi. west of Palvo and 4 mi. east of Tucson. W. Hood, Flood Bldg., San Francisco, ch. engr.

California—See "Miscellaneous," Blythe.

California—Oakland, Antioch & Eastern Ry. and Western Pacific R.R. have entered into agreement whereby latter will finance construction of branch to tap Suisun and Vaca Valley to extend from point on Oakland, Antioch & Eastern main line from Montezuma to Suisun, where connections will be made with branch Northern Electric Ry. About $500,000. H. A. Mitchell, Oakland, secy., treas. and genl. mgr. of former. T. J. Wyche, San Francisco, ch. engr. of latter.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Indiana—Pennsylvania R.R. let contract 3rd track between Trimmer Junction and Boone, 6.4 mi., to P. Clifford & Son, Valparaiso, about $500,000.

★Missouri—City & Leeds Ry., recently incorporated, let contract 3-mi. line from 31st St. to city limits, via Leeds, Kansas City, to Clinton Constr. Co., Kansas City. Howard Ross, 3526 Wyandotte St., Kansas City, interested.

EXCAVATION AND DREDGING

Proposed Work

Fla., Miami—Canal—See "Sewers."

Ill., Lewiston—Comrs. West Matanzas Drainage & Levee Dist. received no bids, Aug. 10, laying 4200 ft. 16-in. tile. Goodell & Millard, Beardstown, engrs. Noted July 26.

N. D., Grand Forks—Ditch—Grand Forks Co. sold $216,000 bonds to build drainage ditch. H. Anderson, co. aud.

Mo., St. Joseph—Ditch—Buchanan Co. will build drainage ditch to carry overflow water of Platte and One Hundred and Two Rivers. About $40,000.

N. M., Santa Fe—Irrigation—Field Bohart, 1819 North Cascade St., Colorado Springs, purchased 45,000 acres in Rio Arriba Co. and will build system.

Utah, Millard — Irrigation — Citizens of Oasis and Deseret, Millard Co., voted $450,000 bonds for system.

Wash., Pasco—Irrigation—Franklin Co. created irigation district No. 1 involving about 12,000 acres of land.

Excavation and Dredging (Continued)

Wash., Walla Walla—Irrigation—Residents on Attalia Irrigation Dist. plan to rebuild system in west end of Walla Walla Co. on Snake River. Bonds for $125,000 voted for work.

Ore., Corvallis — Drainage — Oak Creek D. D., Benton Co., had plans prepared. About $21,350.

Cal., Blythe—Ditches—See "Miscellaneous."

Cal., Imperial—Irrigation—Geo. H. Reed, Imperial, granted permit by State Water Comn., San Francisco, to divert 37 second feet of water from New River for irrigation. Plans include earth dam and ditch 3 mi. long. About $23,000.

Cal., Willows—Irrigation—Jacinto Irrigation Dist., Glenn Co., will construct system to irrigate 20,000 acres land.

Ont., Ojibway—Canal—See "Miscellaneous."

B. C., Victoria — Irrigation — Dept. of Lands plans to install system to be fed by pipe line 27 mi. up north fork of Kettle River to reclaim 3000 acres of Grand Fork Valley. About $500,000.

BIDS DESIRED

Tenn., Trenton —(Official)— Dredging — Until Sept. 8, by Bd. Dir. D. D. No. 4, Gibson, Crockett and Madison Cos., for dredge work and clearing of right-of-way, consisting of 13 contracts. L. T. Berthe, Charleston, Mo., engr.

Ia., Estherville—Ditch—Until Sept. 4, by J. J. Klopp, co. aud., for D. D. No. 120, Emmet Co.

Ia., Hampton—Drainage—Until Sept. 12, by E. D. Haecker, aud. Franklin Co., for D. D. No. 52 requiring 56,850-ft. 6-, 7-, 8-, 10-, 12-, 14-, 18-, 20-, 22-, 24-, 30- and 32-in. tile, 499 ft. 22-in. sewer pipe, 1 bulkhead, 9 catch basins, etc.; D. D. No. 58 requiring 77,425 ft. 6-, 7-, 8-, 10-, 12-, 14-, 16-, 18-, 20-, 22-, 24- and 26-in. tile, 1 bulkhead, 18 catch basins, etc.; D. D. No. 55 requiring 72,750 ft. 6-, 7-, 8-, 10-, 12-, 14-, 15-, 16-, 18-, 22-, 24-, 26-, 28- and 34-in. tile, 1 bulkhead, 7 catch basins, 53 junctions, etc.; D. D. No. 54 requiring 40,280 ft. 6-, 7-, 8-, 10-, 12-, 15-, 16-, 18- and 28-in. tile, 620 ft. open ditch, lowering and relaying 400 ft. 28-in. tile, 1 bulkhead, catch basins, etc. G. H. Mack, Hampton, engr.

Minn., Walker—Ditch—Until Sept. 10, by C. B. Bacon, co. aud., for Judicial Ditch No. 6, Cass and Wadena Cos., requiring 70,234.8 cu.yd. excava. on main ditch and 18,724.1 cu.yd. on 3 laterals, 3 16-ft. steel and wood bridges, 1 5 x 36-in. x 26-ft. corrugated metal culvert; about $13,058. R. A. Dahms, Park Rapids, engr. Noted May 3.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Ill., Paxton**—(Official) — Redredging—Cloud & Thompson, attys., Paxton, let contract redredging main ditch, Union D. D., length 59,745 ft., yardage 209,086 cu.yd., to Richland Contr. Co., Richland, 12c. Noted Aug. 9.

Wis., Madison—Ditch—Dane Co. received bids Sun Prairie Ditch requiring 179,190 cu.yd. excava. from Schultz & Beck, South Milwaukee; Rood Constr. Co., Grand Rapids; Monona Dredging Co., Madison; K. W. Fisher, Hebron, Ind.; Carpenter & Dilly, Chicago; T. J. Dilley, Hebron, Ind.; Wisconsin Drainage Co.; Elkhorn; Seth Day, Dubuque. P. Hintze, Madison, engr.

★**Ia., Sac City**—(Official)—Drainage—Sac Co. let contract Sect. 1 of Big Cedar D. D. No. 181, Sac, Buena Vista, Pocahontas and Calhoun Cos., to W. M. Lana, Council Bluffs, 8½c. per cu.yd.; Sects. 2, 4 and 5, Sprankle Co., 603 Amer. Natl. Bank, Oklahoma, 7.9c.; Sects. 3, 6, 7, 8, 9, 10, 12, 13, 14 and 15, Northern Constr. Co., Elkhart, Ind., 9.65c. Noted Aug. 16.

★**Minn., Center City**—Ditches—Chicago Co. let contract 32 mi. ditches to Foley, Young & Peabody, 218 Merchants Bank Bldg., St. Paul, $48,639.

★**Minn., Detroit**—Ditch—Becker Co. let contract Judicial Ditch No. 2 requiring 34,905 cu.yd. excava. to Baer Bros., Frazee.

★**Minn., Mora**—(Official)—Ditch—Kanabec Co. let contracts Ditch No. 11 to Rood Constr. Co., Grand Rapids, Wis., $23,781, and Lawrence Constr. Co., Grand Rapids, Minn., $16,221. Noted Aug. 16.

Minn., New Ulm—Ditch—Brown Co. received low bid Ditch No. 33 from F. Aufderheider, New Ulm, $95,200. Noted July 26.

★**N. D., Fargo**—Drainage—Cass Co. let contract D. D. No. 21-A requiring 120,000 cu.yd. excavation to W. J. Hoy & Co., 700 Metropolitan Life Bldg., St. Paul.

★**N. D., Fargo**—Drainage—Cass Co. let contract D. D. No. 14-B requiring 800,000 cu.yd. excava. to W. J. Hoy & Co., 700 Metropolitan Life Bldg., St. Paul; Lawrence Constr. Co., Kindred Ave., Grand Rapids, Minn.; Northwestern Drainage Co., Grand Rapids, Wis.

★**Idaho, Twin Falls**—Canal Work—Twin Falls Canal Co. let contract 10 concrete structures on Lower Line Canal to R. W. Faris, 1021 Harrison Blvd., Boise, $38,293; 5 structures to C. H. Mull, Twin Falls, $5650; enlarging canal to J. W. Monarch, 1414 North 7th St., $11,950. Noted Aug. 9.

★**Ore., Prineville**—Irrigation—Ochoco Irrigation Dist., Crook Co., let contract 15½ mi. canal and project dam on system which will irrigate 22,000 acres of land when completed, to Twohy Bros., 219 East 60th St., Portland. Project will cost about $900,000.

Cal., Richmond—Dredging—City received low bids dredging harbor and filling in behind bulkhead from Richmond Dredging Co., Monadnock Bldg., $18,722; American Dredging Co., 255 California St., $39,500; San Francisco Bridge Co., New Bank Bldg., $40,546, both of San Francisco.

★**Que., St. Maurice River**—Dredging—Dept. Pub. Wks. of Dominion Government let contract dredging 146,000 cu.yd. to La Cie de Entreprises Industrielle, Levis, about $15,000.

INDUSTRIAL WORKS

Proposed Work

Mass., Worcester — Worcester Machine Screw Co., Beacon St., plans 5-story, brick factory. Cutting, Carleton & Cutting, 44 Front St., archts.

N. Y., Brooklyn—Lancastershire Realty Co., 44 Court St., soon receives bids, rein.-con. or struc. steel, automobile service station. About $450,000. Shampan & Shampan, 772 Bway., archts.

N. Y., Buffalo—J. Dodd Packing Co., 741 William St., had plans prepared by Henschien & McLaren, archts., 37 West Van Buren St., Chicago, 5-story, 65 x 175-ft. brick and concrete plant. $120,000.

N. Y., Buffalo—New York Central R.R. had plans prepared for 60 x 500-ft. freight terminal, rein.-con., Curtiss and Clark Sts. About $250,000. G. W. Kittredge, Grand Central Terminal, New York City, ch. engr.

N. Y., Brooklyn—Hutwelker & Briggs Co., 14 Hall St., having plans prepared by G. M. Landon, archt., 103 Park Ave., New York City, 4-story addition to cold-storage building, west side Hall St. near Flushing Ave. About $50,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—Chas. J. Huntley, 17 Yarmouth St., soon lets contract 6-story, 61 x 110-ft. public garage. J. Marsden Parks, 46 Pritchard Ave., Somerville, archt.

★**Mass., Cambridge**—Sears, Roebuck & Co., Chicago, let contract, 5-story, 50 x 100-ft. rein.-con. factory, to W. M. Bailey, 88 Broad St., Boston.

★**N. Y., Brooklyn**—Long Island State Hospital Comn., Capitol, Albany, let contract store house and cold-storage building, Clarkson St., to Modern Constr. Co., 927 Bway, New York City, $50,000.

★**N. Y., New York**—Loft Candy Co., Broome and Centre Sts., let contract alterations and addition to factory, 398 Broome St. to J. H. Carl & Co., 510 1st Ave., $80,000.

★**Pa., Phila.**—G. P. Wetherill & Co., 114 North Front St., let contract 4-story, 37 x 78-ft., brick and concrete plant to H. H. Wehmeyer, 1004 West Lehigh Ave. Noted Aug. 9.

★**O., Akron**—C. W. Boshau, 2352 East Mill St. let contract garage, brick, 62 South High St., to Harbaugh Constr. Co., 312 Ohio Bldg., $80,000.

★**O., Cleveland** — American Shipbuilding Co., West 54th St., let contract boiler and engine houses, brick and concrete, to De Hamel Constr. Co., 604 Sweetland Bldg., $80,000.

★**Ind., Indianapolis**—Van Camp Packing Co., 600 Kentucky St., let contract packing plant and warehouse to Bedford Stone & Constr. Co., 810-15 Fletcher Savings Trust Bldg. About $300,000.

★**Ill., Chicago**—Illinois Miniature Division of Natl. Lamp Wks., of General Electric Co., 501 Jefferson St., let contract 3-story, 84 x 243-ft. and 1-story, 42 x 42-ft. factory, warehouse and power house to Wieboldt Contsr. Co., 1534 West Van Buren St. About $60,000.

Tex., Houston—Empire Gas & Fuel Co., 1304 Carter Bldg., recently secured site on ship channel and will soon let contract for refinery. About $2,000,000. Company will also build pipe line to Gainesville connecting it with Producers Refining Co., a subsidiary.

BUILDINGS

Proposed Work

N. Y., Cobleskill — School — Schoharie State School of Agriculture having plans prepared 2-story, brick and steel addition. About $55,000. D. B. Frisbie, Middleburgh, pres. bd. trustees.

N. Y., Gloversville—Bank—Fulton Co. Trust Co., 51 North Main St. plans, brick and stone, 10 North Main St. About $50,000.

N. Y., Herkimer—Hospitals—Herkimer Co. Bd. Supervs. having plans prepared by Pember & Champaigne, archts., 24 James St., Albany, 3 turberculosis hospitals, Salisbury Centre. About $85,000.

N. Y., New York—Theater and Office— J. J. Schubert, 225 West 44th St., plans at 1567-69 Bway. About $50,000. H. J. Knapp, 116 East 16th St., archt.

N. Y., New York—(Official)—Exchange—New York Telephone Co., 15 Dey St., soon lets contract, 3-story, 56 x 94 ft., brick. About $125,000. McKensie, Voorhees & Gelmin, 1123 Bway, archts. Noted July 12.

B. C., Rossland — School — Bd. Educ. plans, 2-story, brick. About $75,000. J. Bowman, archt., 914 Yorkshire Bldg., Vancouver, soon receives bids.

BIDS DESIRED

Conn., Bridgeport—School—Until Sept. 10, by Bd. Educ., on Steuben St. Leonard Asheim, 211 State St., archt.

Conn., Waterbury—School—Until Sept. 4, by Bd. Educ., Grove and Pine Sts. About $530,000. T. A. Walsh, 51 Leavenworth St., archt.

N. Y., Albany—(Official)—City Hall—Until Sept. 5, by Bd. Contr. and Supply, brick, city hall and police headquarters. W. H. Van Guysling, 1 Clinton Sq., archt. Noted July 26.

Pa., Chester—Bank—Until Sept. 5, by Natl. Ex. Bank, 1-story, brick and rein.-con. Mawbury & Uffinger, 56 Liberty St., New York City, archt.

Pa., Uniontown—Until Sept. 4, by Y. M. C. A., for 4-story, 76 x 90 ft. building. About $150,000. D. M. Hertzog, pres. H. W. Altman, 1st Natl. Bank Bldg., archt.

W. Va., West Liberty—Dormitory—Until Sept. 4, by State Bd. Control, Charleston, dormitory at State Normal School. F. Harris, Schmulbach Bldg., Wheeling, archt.

O., Akron — (Official) — High School—Until Sept. 10, by J. F. Barnhart, clk bd. educ., in Firestone Park. T. R. Ridley, Cottage Pl., archt.

O., Ironton—Hotel—Until Sept. 5, by Ironton Hotel Co., Citizens Natl. Bank Bldg., 5-story, 32 x 132-ft. Noted July 12.

O., Upper Sandusky—School—Until Sept. 13, J. F. Stoker, clk. bd. educ., R. F. D. 2, Nevada. Howard & Merriam, 8 East Broad St., Columbus, archts.

Ind., Lafayette—Theater—City plans, on 7th and Main St. About $150,000. T. Bauer, mayor.

N. B., Bathhurst—College—Until Sept. 15, by Sacred Heart College, brick. About $250,000. R. A. Frechette, 30 Bonnacord St., Moncton, archt. Noted Aug. 2.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—School—Bd. Educ. received low bids erecting Michael Anglo School, Charter St. and Phipps Pl. from J. Slotnick, 10 Lawrence St., Chelsea, $166,973; J. Bowen Co., 194 Dudley St., Roxbury, $171,600; Murphy Constr. Co., 7 Water St., $189,576. Noted Aug. 9.

★**Mass., Lowell**—Church—First Church of Christ Scientist, 1482 Middlesex St., let contract to E. S. Barlow, 25 Huntington Ave., Boston. About $75,000.

★**N. Y., Astoria** — School — St. Josephs Congregation let contract, 4-story, Grand and 14th Aves., to Peter Cleary, 15 Marion St., Brooklyn. About $60,000. Noted June 7.

★**N. Y., Brooklyn**—Theater—J. H. Ward, 226 Henry St., let contract to Jardin Co., Inc., 507 5th Ave. About $50,000.

★**N. Y., Cohoes**—High School—Bd. Educ. let contract, 2-story, 60 x 150-ft., brick and stone, to Schaefer Constr. Co., 5 West 31st New York City, $120,000. Noted May 31.

★**N. Y., New York** — Club House — G. Ehret, 233 East 92nd St., let contract alteration to 4-story, 90 x 125-ft. brick and stone club house, Park Ave. and 59th St., to Whatron-Greene & Co., 22 William St., $50,000.

★**N. Y., New York**—Restaurant and Office—T. Healy, Columbus Ave. and 66th St., let contract alteration, 2-story, 100 x 125-ft., 2527-2537 B'way., to Post & McCord, 101 Park Ave., $50,000.

Buildings (Continued)

★**N. Y., Potsdam**—School—Bd. Educ. let contract addition to Normal School, to Bradley & Weed, 200-5th Ave., New York City. About $150,000. Noted Aug. 2.

★**N. Y., Poughkeepsie**—Theater—Stratford Theatre Co., 93 Hooker 9ve., let contract 1-story, 55 x 134 ft. to E. V. Anderson, 39 Market St. About $90,000.

★**N. Y., Watertown**—School—Bd. Educ. let contract alteration and addition, Boon St., to T. J. & J. F. Ward, 109 Ten Eyeck St., $60,000. Noted Aug. 9.

★**N. Y., Yonkers**—School—Bd. Educ. let contract, 3-story, 70 x 170 ft., to P. Sarubbi, 12 North Bway. About $330,000. Noted July 5.

★**Pa., Bradford**—Church—First Presbyterian Congregation let contract 40 x 108-ft. church and 40 x 54-ft. sunday school to E. N. Unruh, Bradford. About $100,000.

★**Pa., Dravosburg** — High School — Bd. Educ. let contract, 2-story, to J. G. Fullman, East End Trust Bldg., Phila., $70,000.

★**Pa., Lansdowne**—Home—St. Vincent's Home let contract, 3-story, 235 x 320-ft. steel and rein.-con. addition to Melody & Keating, 1322 Race St., Phila., $50,000. Noted Aug. 9.

★**Va., Lynchburg**—Y. M. C. A., Lynchburg, let contract 4-story, 50 x 116-ft. building to W. K. Barger, Peoples Bank Bldg. About $100,000. Noted Aug. 23.

★**Ga., Atlanta**—Transportation—Brown-Randolph Co., Marietta and North Forsyth Sts., let contract, 8-story, to Gude & Co., Grant Bldg. About $500,000.

★**Canton** — Office — United Alloy Steel Corp., Belden Ave. and 10th St. N.E., let contract, brick, steel and concrete, to F. W. Mettler, Guardian Bldg., Cleveland, $100,000.

★**O., Washington, C. H.**—School—Bd. Educ. Union Twp. let contract, 2-story, 74 x 36 ft. and 21 x 21 ft. addition, to E. Mast, 100 Greenwood Ave., Zanesville. About $50,000. Noted July 26.

Ind., Anderson—Lodge—B. P. O. E. received low bid, 2-story, 70 x 100-ft., from D. Eshelman & Son, 126 West 5th St., $67,865. Noted July 5.

★**Ind., Ft. Wayne**—Y. M. C. A. let contract 7-story, rein.-con., stone and brick, to Indiana Eng. Co., 528-30 Lincoln Life Bldg., $225,000. Noted July 12.

Mich., Detroit—Hotel—Louis Duscoff, 481 Franklin St., let contract 4-story, brick and steel, Brainard St., to Natl. Bldg. Constr. Co., 60 Lafayette Bldg.

★**Ill., Chicago**—Chapel and Convent—Sisters of Poor Clares let contract, 2- and 3-story, brick, 5245-59 West 105th St., to J. Gebhardt & Sons, 1825 Orchard St. About $130,000.

★**Ill., Rock Island**—Hospital—St. Anthonys Hospital let contract to C. J. Larkin, Rock Island. About $200,000. Noted Aug. 2.

★**Wis., Milwaukee**—School—State Bd. Industrial Educ. let contract Central Continuation School to G. E. Kahn, 688 Kachet Ave. About $200,000. Noted July 2.

★**Wis., Watertown**—Hospital—Sisters St. Mary let contract to Mallow & Kaddatz, Watertown, $120,000.

★**Ia., Mason City**—High School—Bd. Educ. let contract, Washington High School, to H. F. Jones, Mason City. About $78,000. Noted July 26.

★**Minn., Warroad** — High School — Bd. Educ. let contract, 58 x 64 ft., to Laurence Constr. Co., 624 Plymouth Bldg., Minneapolis. About $60,000. Noted July 19.

★**Neb., York**—(Official)—High School—Bd. Educ. let contract, 2-story, 80 x 220-ft., brick, stone, and rein.-conc., to Olson & Johnson, 638 1st Natl. Bank Bldg., Omaha, $117,405. Noted Aug. 16.

★**S. D., Aberdeen**—Dormitory—Northern Normal School let contract, Lincoln Hall, to Madsen Constr. Co., Plymouth Bldg., Minneapolis. About $50,000.

★**Mo., St. Louis**—Theater and Office—Vaudeville Theater Co., 705 Olive St., let contract alterations to Federal Constr. Co., 812 Olive St., $75,000.

★**Tex., Waco**—Auditorium—Waco Cotton Palace let contract to H. J. Ainsworth, Waco, $51,063.

★**Idaho, Kellog**—Store and Theater—J. McConnell and E. McIntosh, Kellogg, let contract, 2-story, 100 x 125 ft., brick, to O. W. Anderson, Spokane. About $57,742.

★**Ore., Portland**—Spaulding Estate, Park and Alders Sts., let contract 4-story building to Bingham & McClelland, Platt Bldg. About $55,000.

★**Cal., Oxnard**—Bank and Office—1st Natl. Bank Bldg. let contract, 2-story, brick, to Los Angeles Planing Mill Co., 1812 Industrial St., Los Angeles. About $55,000.

FEDERAL GOVERNMENT WORK

Proposed Work

Ga., West Point—Post Office—J. A. Wetmore, superv. archt., treas. dept., rejected all bids as they were in excess of appropriation. Noted Aug. 23.

BIDS DESIRED

Conn., New London — Dredging — Until Sept. 4, by Bureau of Yards and Docks (F. R. Harris, ch.) Navy Dept., Wash., about 135,000 cu.yd., at U. S. submarine base.

Md., Annapolis — Dredging — Until Sept. 10, by Bureau of Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., in channel at rifle range, U. S. Naval Academy.

Wash., D. C.—Coast Guard—Until Sept. 25, by Navy Dept., U. S. Coast Guard Headquarters, new building and accessories at Coast Guard Station No. 166. Noted July 12; advertised in this issue.

Wash., D. C. — Air Compressors — Until Sept. 4, by Bureau of Yards and Docks (F. R. Harris, ch.),Navy Dept., 2 motor and 2 engine-driven 2-stage air compressors having capacity of 500 cu.ft. per min.

Va., Cape Henry—Building—Until Sept. 18, by Secy. of Agriculture, Wash., 3-story brick building for Weather Bureau; advertised in this issue.

Miss., Vicksburg — Levee Work — Until Sept. 4, by 3rd Mississippi River Dist., Box 404, about 1,100,000 cu.yd. levee work; advertised in this issue.

Mich., Detroit—Backfilling—Until Sept. 4 by U. S. Eng. Office, Detroit, backfilling walls of 4th lock, Marys Falls, Canal.

Idaho, Twin Falls—Post Office—Until Oct. 1, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Hawaii, Pearl Harbor — Storehouse — Until Sept. 10, by Bureau of Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., rein.-con.

P. R., El Cayey—Building—Until Sept. 3, by Bureau of Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., for radio buildings at high-power radio station.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Conn., New London**—Storehouse—Bureau of Yards and Docks, Navy Dept., Wash., let contract to R. H. Arnold Co., 1025 Vermont Ave., Wash., D. C., $119,600. Noted Aug. 9.

★**N. Y., New York**—Electric Lighting System—Bureau of Yards and Docks, Navy Dept., Wash., let contract system in structural shop to L. K. Comstock, 30 Church St., $10,490. Noted Aug. 9.

★**Pa., Harrisburg** — Storehouse—Bureau of Yards and Docks let contract to James L. Stuart, 233 Oliver Ave., Pittsburgh, and not J. L. Stewart Co., 30 Church St., New York City. About $400,000. Noted Aug. 16.

Pa., Phila.—Quarters for Radio Operators—Bureau of Yards and Docks, Navy Dept., Wash., received low bids (work complete), from Hogg Constr. Co., 1634 Sansom St., $16,656, and W. W. Austin & Co., Transportation Bldg., $16,747. Noted Aug. 9.

Pa., Pittsburgh—Post Office—J. A. Wetmore, superv. archt., treas. dept., received only bid remodeling and extension from W. H. Fissell, 1328 Bway., New York City, $110,000.

S. C., Port Royal—Officers' Quarters—Bureau of Yards and Docks, Navy Dept., Wash., received low bids from W. T. Hadlow, 831 Park St., Jacksonville, $7477; J. A. Jones, Charlotte, $10,676; Artley Co., 121 Bull St., Savannah, $11,800. Noted Aug. 16.

Ia., Cherokee—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids Aug. 22 from Johnson Constr. Co., Fargo, $43,997; G. W. Stiles Constr. Co., 209 South La Salle St., Chicago, $55,252; J. H. Wiese, 1301 City Natl. Bank, Omaha, $55,730. Noted July 19.

Kan., Eldorado—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids from Johnson Constr. Co., Fargo, $43,397; Geo. A. Shaul, Seneca, $51,795; E. A. Steininger Constr. Co., Victoria Bldg., **St. Louis**, $57,588. Noted July 19.

★**Mo., St. Louis**—Levee Work—Mississippi River Comn., 1311 International Life Bldg., let contract 90,000 cu.yd. earthwork in Hunt D. D., Illinois, to Cameron, Joyce & Co., Keokuk, $25,000. Noted July 26.

★**Mont., St. Ignatius**—Reclamation—U. S. Rec. Ser., St. Ignatius, let contracts about 60,000 cu.yd. earthwork and 100,000 sq.ft. concrete lining on Flathead Project to Clarence B. Long, Polson, schedule 1, $37,620; Percy M. Ross, St. Ignatius, schedules 2 and 3, $7637. Noted June 21.

★**Wash., Puget Sound**—(Bremerton P. O.)—Storehouse—Bureau of Yards and Docks, Navy Dept., Wash., let contract to A. W. Quiest & Co., New Times Bldg., Seattle, $505,211. Noted Aug. 23.

★**Wash., Puget Sound**—(Bremerton P. O.)—Torpedo Station—Bureau of Yards and Docks, Navy Dept., Wash., let contract to Parker & Loftus, Bremerton, $23,912. Noted Aug. 30.

MISCELLANEOUS

Proposed Work

Bulkhead — Jersey City, N. J. — City Comrs. plan, concrete, at foot of Hornell St. About $60,000. F. A. Dolan, city clk.

Harbor Improvement—Jersey City, N. J.—City Comn. authorized appropriation of $147,300 for improvement and development of waterfront along Hackensack River at foot Yale Ave. C. A. Van Keuren, city engr.

Elevated Railway—Philadelphia, Pa.—(Official)—W. S. Twining, dir. dept. city transit, received no bids, Aug. 21, steel framework, railings, concrete floors, etc., for Frankfort Elevated Ry. Noted Aug. 16.

Dry Dock—Charleston, S. C.—Valk & Murdock Co., foot Calhoun St., plan huge sectional floating dry dock at plant on Cooper River, about 440 ft. long with beam of 100 ft.

River Terminals—Memphis, Tenn.—Citizens voted $500,000 bond to build river terminals. J. H. Weatherford, city engr. Noted Aug. 9.

Subway—Ft. Wayne, Ind.—Lake Shore & Michigan Southern Ry. plans, at Elizabeth St. G. C. Cleveland, Cleveland, ch. engr.

Pipe Line—Houston, Tex.—See "Industrial Works."

Incinerator — Okmulgee, Okla.—Citizens voted $30,000 bonds to build incinerator. M. N. Coles, city engr. Noted July 26.

Dock—Tacoma, Wash. — Council plans $135,000 bond issue to build dock. When completed same will cost $240,000, there being $105,000 available for work now. W. C. Raleigh, city engr.

Levees, Etc.—Blythe, Cal.—Palo Verde Protection Dist. retained J. C. Allison, 735 Van Nuys Bldg., Los Angeles, as engineer for the constructing levees, ditches, 20 mi. railway, etc.; also to purchase railway equipment, steam shovels, scrapers, fresnoes, etc. Project to cost about $1,000,000.

Subway—Aurora, Ont.—King and Whitchurch Councils and Toronto and York Highway Comn. plan on Yonge St., 16 ft. high. E. A. James, Toronto, engr.

Docks, Etc. — Ojibway, Ont. — Canada Steel Corp., subsidiary of U. S. Steel Corp., filed plans with Dominion Government for preliminary work of building docks, etc. Plans include canal running through property fo rdistance of 2500 ft., to be 200 ft. wide and 25 ft. deep. Company plans to build docks on banks of canal, also 1000-ft. dock on river front with marine slip and wharves. About $250,000.

Incinerator—Sarnia, Ont.—City plans to install. About $25,000. J. A. Baird, engr.

BIDS DESIRED

Duct Line—Brooklyn, N. Y.—Until Sept. 5, by Pub. Ser. Comn., 120 Bway., New York City, for duct line for part of Eastern Pkway. Rapid Transit R.R.

Retaining Wall—Lebanon, O.—(Official)—Until Sept. 10 (change of date), by Warren Co. Comrs., rein.-con., on Rd. No. 31. Noted Aug. 16.

Dam and Retaining Walls — Marshalltown, Ia.—Until Sept. 10, by J. J. Wilson, city clk., rein.-con., over channel north of river at Center St. About $10,000. W. H. Steiner, city engr. Noted Aug. 16.

Dock — Georgetown, Wash.—(Official)—Until Sept. 10, by Comrs. King Co., 40 x 600-ft. About $35,000. S. J. Humes, co. engr. Noted Aug. 2.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Incinerator — Brookline, Mass.—Bd. Pub. Wks. let contract to Jas. Driscoll, 95 Washington St., about $33,213. Noted Aug. 2.

Sea Wall—Quincy, Mass.—Com. on Waterways and Pub. Lands received low bid sea wall on Houghs Neck, Manet Ave., from D. F. Drowley, 658 Adams St.

★**Refuse Destructor — Rockaway Beach, N. Y.**—(Official)—Bureau of St. Cleaning let contract, Elizabeth Pl., Barbadoes Creek, Thursley and Beach 63rd Sts., to Kelly & Kelly, Inc., 299 Madison Ave., New York City, $148,500.

★**Dam**—Prineville, Ore.—See "Excavation and Dredging."

★**Transmission Line**—Sherbrooke, Que.—City let contract, from Sherbrooke to power plant at 2 Mile Falls, to Coders & Sons, 161 Wellington St., London, $150,000. Noted Aug. 9.

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until Sept. 4, 1917.

Montgomery Bridge

Montgomery, Pa.

Sealed proposals for the construction of a reinforced concrete bridge over the West Branch of the Susquehanna River at the foot of Second Street in the Borough of Montgomery, Pennsylvania, will be received by the Board of Commissioners of Lycoming County, Pennsylvania, at the office of their Chief Clerk, until 12 o'clock, noon, on September 4th, 1917. At the same place, the proposals will be publicly opened and read at 2 o'clock P. M.

The bridge as contemplated will be about one thousand (1000) feet long, and will consist of nine (9) open spandrel arches, three of the arches will be 101 feet span, and the remainder will be 93 feet.

Bids will be asked at the same time for a concrete viaduct approximately four hundred (400) feet long on the Montgomery side, adjacent to the bridge.

Prospective bidders may secure copies of the plans and specifications, including form of proposal, from L. O. Bower, Chief Clerk, of the County Commissioners at his office in the Court House, Williamsport, Pennsylvania, by making a deposit of twenty-five dollars ($25.00), which sum will be refunded to all bidders upon return of the plans and specifications in good order, and to all other Contractors returning same before date on which bids are received.

A certified check for the sum of ten thousand ($10,000.00) dollars, payable to H. B. Achenbach, Treasurer of Lycoming County, must accompany each proposal, both of which must be enclosed in a sealed envelope, and marked, "THE PROPOSAL FOR THE CONSTRUCTION OF THE MONTGOMERY BRIDGE" and must be delivered to L. O. Bower, Chief Clerk, County Commissioners' Office, Court House, Williamsport, Pennsylvania.

The right is reserved by the Commissioners to reject any and all bids, or to accept any bid they may deem to the best interests of the County.

Attest:
L. O. BOWER, Chief Clerk.
CHARLES W. MYERS,
JOSEPH H. NICELY,
JOHN G. DURRWACHTER,
County Commissioners.
M. C. KRAUSE, Engineer,
335 Pine Street, Williamsport, Pa.

PROPOSALS FOR LEVEE WORK.—Office of Third Mississippi River District, P. O. Box 404, Vicksburg, Miss.—Sealed proposals will be received here until 11 o'clock, a.m., Sept. 4, 1917, and then publicly opened, for constructing about 1,100,000 cubic yards of levee work. Information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., August 15, 1917.—Sealed proposals will be opened in this office at 3 p.m., September 17, 1917, for the construction complete of two additional dolphins and the furnishing and installing complete of thirty-two spring buffers at the wharf of the Quarantine Station at Tampa Bay, Florida. Drawings and specifications may be obtained from the Custodian at Tampa Bay, Florida, or at this office, in the discretion of the Acting Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a. m. for issue mailed the next day

PROPOSALS

Bids received until September 4, 1917.

State Highway Work

PENNSYLVANIA STATE HIGHWAY DEPARTMENT,
Harrisburg, Pa.

Sealed proposals will be received at said office until 10 a. m., September 4, 1917, when bids will be publicly opened and scheduled, and contracts awarded as soon thereafter as possible for the reconstruction of 6513 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Washington Township, Fayette County, Route No. 247; 1,270 linear feet of Vitrified Block Pavement, 26 feet wide, situated in Swatara Township, Dauphin County, State-aid Application No. 570; 13,007 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Manor Township, Armstrong County, State-aid Application No. 397; 5,800 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Clinton Township, Butler County, Bureau of Township Highways Authorization No. 319; 6,537 linear feet of reinforced Concrete Pavement, 16 feet wide, situated in Foster Township, McKean County, Route No. 96; 6,537 linear feet of Reinforced Concrete Pavement, 16 feet wide, situated in Moreland and Abington Townships, Montgomery County, State-aid Application No. 648; 9,878 linear feet of Vitrified Block Pavement, 16 feet wide, situated in East Taylor Township, 11,070 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Jackson and East Taylor Townships, and 11,975 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Jackson Township, all in Cambria County, Route No. 52; 16,852 linear feet of Vitrified Block and Reinforced Concrete Pavement, 16 feet wide, situated in South Fayette Township, Allegheny County, Route No. 108; 19,318 linear feet of Vitrified Block and Reinforced Concrete Pavement, 16 feet wide, situated in Cecil and North Strabane Townships, Washington County, Route No. 108; 5,900 linear feet of Reinforced Concrete and Vitrified Block Pavement, 16 feet wide, situated in East Bethlehem Township, Washington County, Route No. 268; 11,857 linear feet of Reinforced Concrete Pavement, 16 feet to 20½ feet wide, situated in Hanover Township, Lehigh County, Route No. 159, and 7,821 linear feet of Bituminous Pavement, 18 feet wide, situated in South Abington Township, Lackawanna County, Route No. 9; also, for the grading and drainage of 9,299 linear feet of roadbed, 24 feet to 26 feet in width, situated in Moon and Hopewell Townships, Beaver County, State-aid Applications Nos. 254 and 294. Plans and specifications may be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Full particulars and information on application to Frank B. Black, State Highway Commissioner.

PROPOSALS

Bids received until Sept. 4, 1917.

Duboistown Bridge

Duboistown, Pa.

Sealed proposals for the construction of a reinforced concrete bridge over the West Branch of the Susquehanna River between the foot of Arch Street in West Williamsport and the foot of what will be High Street in the Borough of Duboistown, Pennsylvania, will be received by the Board of Commissioners of Lycoming County, Pennsylvania, at the office of their Chief Clerk, until 12 o'clock, noon, on September 4th, 1917. At the same place, the proposals will be publicly opened at 2 o'clock P. M.

The bridge as contemplated, will be about 1500 feet long and will consist of thirteen (13) open spandrel arches, of ninety-eight (98) feet clear span.

Prospective bidders may secure copies of the plans and specifications, including form of proposals, from L. O. Bower, Chief Clerk of the County Commissioners, at his office in the Court House, Williamsport, Pennsylvania, by making a deposit of twenty-five ($25.00) dollars, which sum will be refunded to all bidders upon return of plans and specifications in good order, and to all other contractors returning same before date on which bids are received.

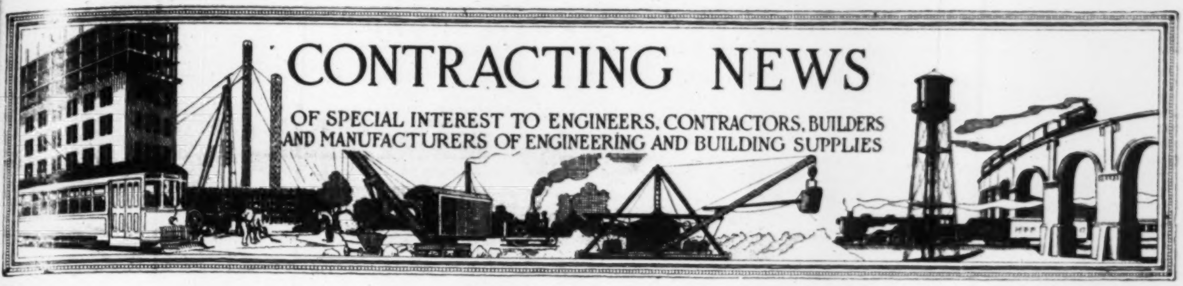
A certified check for the sum of ten thousand ($10,000.00) dollars payable to H. B. Achenbach, Treasurer of Lycoming County, must accompany each proposal, both of which must be enclosed in a sealed envelope and marked, "Proposal for the Construction of the Duboistown Bridge" and must be delivered to L. O. Bower, Chief Clerk, County Commissioners' Office, Court House, Williamsport, Pennsylvania.

The right is reserved by the Commissioners to reject any and all bids, or to accept any bid they may deem to the best interests of the County.

Attest:
L. O. BOWER, Chief Clerk.
CHARLES W. MYERS,
JOSEPH H. NICELY,
JOHN G. DURRWACHTER,
County Commissioners.
M. C. KRAUSE, Engineer,
335 Pine Street, Williamsport, Pa.

PROPOSALS FOR DREDGING.—Engineer Office, U. S. Army, 405 Custom House, San Francisco, Cal.—Sealed proposals for dredging part of point off Dos Rios Island and vicinity near mouth of Sacramento River will be received here until 10 a.m., Sept. 5, 1917, and then opened. Information on application.

PROPOSALS will be received by the Navy Department at U. S. Coast Guard Headquarters, Washington, D. C., until 2 P. M., September 25, 1917, and publicly opened immediately thereafter for constructing new buildings and accessories at Coast Guard Station No. 166, Wash Woods, N. C. All proposals should be inclosed in sealed envelope and marked "Proposal for Station No. 166, to be opened at 2 P. M., September 25, 1917," addressed to the "Captain Commandant, U. S. Coast Guard, Washington, D. C." Blank proposals, specifications and other information will be furnished upon application to District Superintendent, Seventh District, Coast Guard, Elizabeth City, N. C.; Keeper, Coast Guard Station No. 166, Deals, N. C., or to U. S. Coast Guard Headquarters. E. P. Bertholf, Captain Commandant.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by **heavy type**; declines by *italics*.

PIG IRON

Below are the present quotations with a comparison of a month and a year ago.

	Sept. 1, 1917	One Month Ago	One Year Ago
CINCINNATI			
No. 2 Southern foundry....	$49.90	$49.90	$16.90
No. 2 Southern Ohio........	56.26	56.26	19.26
NEW YORK			
No. 2X Northern foundry....	*52.50*	54.25	19.50
No. 2 plain Northern foundry	*52.00*	53.75	19.25
No. 2 Southern foundry†....	*52.25*	52.75	19.25
BIRMINGHAM			
No. 2 Southern foundry....	47.00	47.00	14.00
CHICAGO			
No. 2 Northern foundry....	55.00	55.00	18.00
No. 2 Southern foundry....	54.00	....	....
PITTSBURGH			
Bessemer iron*	*52.95*	55.95	21.95
Basic iron*	*50.95*	53.95	18.95

*These prices include the freight charge from the valley to the Pittsburgh district. †Delivered Tidewater, New York.

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per ton f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago*	
	Sept. 1, 1917	One Year Ago	Sept. 1, 1917	One Year Ago
Standard bessemer rails.	$38.00	$33.00	$38.00	$33.00
Standard openhearth rails	40.00	35.00	40.00	35.00
Light rails, 8 to 10 lb..	83.00 to 84.00	50.00	**95.00** to **100.00**	43.00
Light rails, 12 to 14 lb.	82.00 to 83.00	49.00	**95.00** to **100.00**	42.00
Light rails, 25 to 45 lb.	75.00 to 80.00	47.00	**95.00** to **100.00**	40.00

*Activity in rails principally governmental.

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh				
	Sept. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco
Standard railroad spikes, $\frac{9}{16}$ in. and larger......	**$7.00**	$2.65	$5.00	$5.75	$5.75
Track bolts	**7.00**	3.25	6.25	Premium	7.30
Standard section angle bars	3.65	2.00	**4.50**	Premium	4.65

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

	Material	6 In. x 8 in. by 8 Ft.	7 In. x 9 in. by 8 Ft. 6 In.
New York	Yellow Pine	$1.06 to 1.11	$1.25
St. Louis	No. 1 White Oak	1.00	.75
Chicago	White Oak	.97	.82
San Francisco..	Green	.77	1.01
San Francisco..	Creosoted	1.20	1.62

Should be 75¢

PIPE

PIPE—The following discounts are for carload lots f.o.b. Pittsburgh, as per basing card of July 2, 1917:

BUTT WELD

Steel Inches	Black	Galvanized	Iron Inches	Black	Galvanized
¾ to 3......	*49%*	*35½%*	¾ to 1½......	33%	17%

LAP WELD

Steel Inches	Black	Galvanized	Iron Inches	Black	Galvanized
2	*42%*	*29½%*	2	26%	12%
2½ to 6......	*45%*	*32½%*	2½ to 4......	28%	15%
7 to 12......	*42%*	*28½%*	4½ to 6......	28%	15%
13 and 14.....	*32½%*	....	7 to 12........	25%	12%
15	*30%*	....			

BUTT WELD, EXTRA STRONG PLAIN ENDS

Steel Inches	Black	Galvanized	Iron Inches	Black	Galvanized
¾ to 1½.....	*47%*	*34½%*	¾ to 1½......	33%	18%
2 to 3.......	*48%*	*35½%*			

LAP WELD, EXTRA STRONG PLAIN ENDS

Steel Inches	Black	Galvanized	Iron Inches	Black	Galvanized
2	*40%*	*28½%*	2	27%	14%
2¼ to 4......	*43%*	*31½%*	2¼ to 4......	29%	17%
4½ to 6......	*42%*	*30½%*	4½ to 6......	28%	16%
7 to 8.......	*38%*	*24½%*	7 to 8........	20%	8%
9 to 12.......	*35%*	*19½%*	9 to 12........	15%	3%

From warehouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded...........	38%	12.8%	34.27%
3½ to 6 in. lap welded..........	**18%**	38.8%	27.27%
7 to 12 in. lap welded..........	**10%**	35.8%	21.27%

	Galvanized		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded...........	22%	27.8%	19.27%
3½ to 6 in. lap welded..........	List	24.8%	13.27%
7 to 12 in. lap welded..........	List	20.8%	6.27%

Malleable fittings, Class B and C, from New York stock sell at 5 and 5% from list prices. Cast iron, standard sizes, 34 and 5%.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York							
	Sept. 1, 1917	1 Mo. Ago	One Yr. Ago	Birmingham	Chicago	St. Louis	San Francisco	Dallas
4 in.	$68.50	$68.50	$33.50	$63.00	$68.50	*$64.00*	**$76.00**	$72.00
6 in. and over	65.50	65.50	30.50	60.00	65.50	*61.00*	73.00	69.00

Gas pipe and 16-ft. lengths are $1 per ton extra.

CLAY DRAIN TILE—The following prices are per 1000 lin.ft.:

	New York					
Size, In.	Sept. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$24.80	$18.40	$15.00	$26.25	$19.80
4	51.00	33.95	20.70	18.00	33.75	28.10
5	65.00	47.50	28.75	23.00	48.75	....
6	90.00	59.75	40.25	27.00	67.50	45.95
8	130.00	100.00	74.75	55.00	....	82.75

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York					
Size, In.	Sept. 2, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	*$0.093*	$0.0725	.....	$0.09	**$0.075**	$0.1032
4	*.093*	.0725	.....	.10	**.10**	.1032
5	*.1395*	.12	.....	.135	**.125**	.1548
6	*.1395*	.12	$0.12	.15	**.15**	.1548
8	*.217*	.165	.165	.21	**.2256**	.215
10	*.3255*	.24	.23	.315	**.30**	.301
12	*.4185*	.30	.33	.405	**.40**	.387
15	*.558*	.405	.50	.54	.....	.559
18	*.775*	.57	.75	.75	.75	.731
20	*.93*	.675	.90	.90	.9625	.86
22	*1.24*	.90	1.13	1.20	1.155	1.118
24	*1.395*	.975	1.28	1.35	1.375	1.29
27	*2.08*	1.665	1.30	....	.....	1.935
30	*2.304*	2.035	1.70	....	.....	2.365
33	*3.06*	2.625	2.25	....	.....	3.05
36	*3.485*	2.94	2.50	....	.....	3.44

	Kansas City	Los Angeles	New Orleans	Boston	Denver
3	*$0.10*	$0.06	**$0.056**	*$0.111*	$0.07
5	*.135*	.10	**.0875**	*.1665*	.12*
8	.18	.18	**.16**	*.259*	.19
12	.36	.32	**.3145**	*.4995*	.31
24	1.35	1.125	**1.20**	*1.665*	1.14
36	3.25	.....	......	*3.5875*	2.10†

*6-in. †30-in.

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices in tank cars 8000 gal. minimum f.o.b. places named:

	Sept. 1, 1917 Gallon	One Month Ago Gallon
New York, 40-50% asphalt..............	...c.*	6½c.
New York, 60-70% asphalt..............	...c.*	7c.
New York, dust layer	...c.*	7¼c.
New York, binder	...c.*	8¼c.
St. Louis, 45-50% asphalt..............	5c.	5c.
Chicago, 15-20% asphalt	6½c.	....
Chicago, dust layer	8½c.	....
Chicago, binder	12½c.	....
Dallas, 40-50% asphalt.................	6c.	7c.
Dallas, 60-70% asphalt.................	7c.	8c.
Dallas, 75-90% asphalt.................	8c.	....
San Francisco, 75-95% asphalt.........	$1.90 bbl. (42 gal.)	$1.90 bbl.

*Road oils are extremely scarce in New York and no quotations are available.

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	$30.00	....
Chicago	Mexican	24.00	20.00
St. Louis	Texaco or Mexican......	22.50	19.50
San Francisco	California	14.50	12.50
Dallas	Texaco and Mexican.....	....	**20.00**
Denver...............	California	*21.00*	....
Denver...............	Trinidad	*31.00*	....
Kansas City	Trinidad	**26.37**	....

PAVING STONE—

		Sept. 1, 1917
New York	Manhattan	$2.50 sq.yd.
	Other boroughs	2.25 sq.yd.
Boston	5-in. granite	2.55 sq.yd.
Chicago	About 4x8x4 dressed.......	2.25 sq.yd.
	About 4x8x4 common........	1.80 sq.yd.
Kansas City	Limestone	2.00 sq.yd.
San Francisco	Basalt block 4x7x8	57.75 per M

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York*	3½	16	$2.00
New York*	4	16	2.25
Chicago	4	16	1.85
Chicago	City specifications		*1.70*
St. Louis	3½	16	
	City specifications		2.00
	Other specifications		1.60
Boston	4	20	2.62
Kansas City	4	16	2.25
New Orleans	4	16	2.85

*Very scarce.

FLAGGING—

		Sept. 1, 1917
New York	Bronx	$0.17 sq.ft.
	Manhattan	.18 sq.ft.
	Queens, 5 ft. square	.19 sq.ft.
Chicago	18 in. wide	.75 lin.ft.
San Francisco	Basalt, 4x7x8 in.	57.50 per M

CURBING—Prices per linear foot are as follows:

New York	5 x 16	$0.45
	5 x 20	.50
Chicago	6 x 18	.60
St. Louis	5 x 16 square edge	.72
	5 x 16 bull nose	.78
San Francisco	5 x 16	.75
	5 x 20	.85

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

		Gravel				Sand	
		1½ In.		¾ In.			
	Paving	Sept. 1, 1917	One Yr. Ago	Sept. 1, 1917	One Yr. Ago	Sept. 1, 1917	One Yr. Ago
New York	$1.25	$1.25	$1.00	$1.35	$1.10	$0.50	$0.50
Chicago	1.40	1.40	1.15	1.40	1.15	1.40	1.15
St. Louis	....	1.08	.70	1.08	.70	1.08	.60
Dallas	....	1.50	....	1.50	....	1.10	....
San Francisco	....	1.00	1.25	1.00	1.25	1.00	1.20
New Orleans	....	1.90	....	2.25	....	1.25	....
Denver	....	*1.40*	....	*1.40*	....	.95	....
Kansas City	....	2.00	....	2.25	....	.60	....
Boston	....	1.50	....	1.60	....	.80	....
Los Angeles	....	.85	....	.85	....	.55	....

Fine White Sand—St. Louis:

Pacific............$5.00 per ton Ottawa...........$7.00 per ton

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In.		¾ In.	
	Sept. 1, 1917	One Year Ago	Sept. 1, 1917	One Year Ago
New York	$1.10	$0.90	$1.25	$0.95
Chicago	1.40	.95	1.40	.95
St. Louis	1.35	1.00	1.35	1.00
Dallas	1.42	....	....	....
San Francisco	1.00	1.25	1.00	1.25
Denver	*1.40*	....	*1.40*	....
Boston	1.40	....	1.40	....
Kansas City	1.60	....	1.70	....
Los Angeles	.95	....	.95	....

LIME—Warehouse prices:

	Hydrated per Ton		Lump per 300-Lb. Barrel	
	Finished	Common	Finished	Common
New York	$16.50	$13.25	$2.10	$1.90
Chicago	15.00	12.00	1.90	....
St. Louis	12.00	10.75	....	....
Dallas	20.00	15.00	....	....
San Francisco—				
Washington hand	17.00	....	....	1.65
California hand	13.50	....	....	....

ROSENDALE NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., including bags:

New York $1.15

30c. allowed for bags.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags:

	Sept. 1, 1917	One Month Ago	One Year Ago
New York	$2.22	$2.22	$1.75
Jersey City	2.16	2.16	1.66
Boston	2.77	2.77	1.92
Chicago	*2.21*	2.31	1.86
Pittsburgh	2.31	2.31	1.81
Cleveland	2.44	2.44	1.94
Detroit	2.40	2.40	1.90
Indianapolis	*2.38*	2.44	1.99
Toledo	*2.40*	2.44	1.99
Milwaukee	*2.33*	2.43	1.98
Minneapolis	*2.48*	2.58	2.13
Duluth	2.51	2.51	2.06
Peoria	*2.33*	2.43	1.94
Cedar Rapids	*2.48*	2.54	2.05
Davenport	*2.40*	2.49	1.95
St. Louis	2.45	2.45	1.85
San Francisco	2.30	2.30	...
Dallas	*2.15*	2.30	2.30
Los Angeles	2.30	2.15	...
New Orleans	*2.54*	2.58	...
Kansas City	2.77	2.29	...
St. Paul	*2.48*	2.63	...

TRIANGLE MESH REINFORCEMENT—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.89	$0.92	$0.93	$0.94	$1.06	$1.27
049	0.049	1.13	1.18	1.18	1.20	1.34	1.63
068	0.068	1.42	1.47	1.49	1.50	1.68	2.04
093	0.093	1.82	1.89	1.91	1.92	2.17	2.62
126	0.126	2.31	2.39	2.42	2.44	2.74	3.32
153	0.153	2.75	2.86	2.88	2.91	3.27	3.96
180	0.180	3.16	3.27	3.31	3.34	3.76	....
245	0.245	4.17	4.33	4.38	4.41	4.96	....
287	0.287	4.82	5.00	5.04	5.10	5.72	6.94
336	0.336	5.58	5.80	5.85	5.92	6.66	....
PLAIN 4-IN. x 8-IN. MESH							
036P	0.036	.69	.71	.72	.73	.82	
053P	0.053	.97	1.01	1.02	1.03	1.16	..
072P	0.072	1.26	1.30	1.32	1.33	1.50	..
097P	0.097	1.62	1.68	1.70	1.71	1.93	..
049R	0.049	.97	1.01	1.02	1.03	1.15	[illegible]
067R	0.067	1.26	1.30	1.32	1.33	1.50	[illegible]
089R	0.089	1.62	1.68	1.70	1.71	1.93	88

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 5[illegible] in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized runs about 10% higher than plain.

EXPANDED METAL LATH—Prices per 100 yd. for painted are as follows:

		Carload					
		New York					
Gage	Weight	Sept. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$31.00	$18.00	$31.00	$34.00	$29.00	$32.00
26	250	32.05	19.00	32.00	35.00	30.25	
25	300	33.15	20.00	33.00	....	....	
24	340	34.25	21.00	34.00	37.00	33.00	36.00
22	450	36.45	24.00	36.00	....	....	

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING—The following quotations are per 100 lb.:

ROLLED FROM BILLETS

		Warehouse					
		New York					
In.	Mill Shipment	Sept. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
¾ and larger	*	$5.10	$3.25	$4.736	$4.50	$6.00	$4.75
⅝	*	5.15	3.35	4.786	4.55	6.05	4.80
½	*	5.20	3.40	4.836	4.60	6.10	4.85
⅜	*	5.35	3.65	4.986	4.75	6.25	5.00
¼	*	5.60	4.00	5.236	5.00	6.50	6.00

*Mill quotations on actual specifications.

ROLLED FROM RAILS

	Dallas	St. Louis	Chicago
¾ in. and larger	$4.75	$4.00	$4.50
⅝	4.80	4.05	4.55
½	4.85	4.10	4.60
⅜	5.00	4.25	4.75
¼	6.00	5.00	5.00

BRICK—The price per 1000 in cargo or carload lots is as follows:

	Common			Paving	
	Sept. 1, 1917	One Month Ago	One Year Ago	Brick	Block
New York	$8.50	$8.50	$7.75	....	....
Boston	13.25	13.25	....	....	$25.00
Chicago	8.00	8.00	6.00	$16.00	24.00
St. Louis, salmon	8.00	7.00	9.00	18.00	....
St. Louis, selected	10.00	10.00	9.00	....	....
Denver	8.00	8.00	....	....	14.00
Los Angeles	7.50	....	....	....	28.00
San Francisco	10.00	10.00	10.00	....	....
Dallas	8.10	8.10	....	22.00	22.50
New Orleans	9.00	9.00	....	....	*10.50
Kansas City	11.00	11.00	....	....	20.00

*Silica brick for foundations.

HOLLOW TILE—Hollow building tile price per block in cents:

	New York					
	Sept. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4x12x12	$0.0925	$0.065	$0.079	$0.054	$0.0825	$0.07
6x12x12	.1295	.091	.12	.066	.11	.09
8x12x12	.15725	.11	.135	.09	.1275	.12
10x12x12	.185	.13	.16	.15	.20	.15
12x12x12	.23125	.1625	.20	.18	.22	.18

	4x12x12	8x12x12	12x12x12
Boston	$0.0957	$0.171	$0.2266
Kansas City*	.0595	.1125	.1575
Denver	.09	.17	.25
New Orleans	.0892	.1417	.1863
Los Angeles*	.05	.10	.165

*In quantities of 1000.

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

		New York					
	Pittsburgh	Sept. 1, 1917	1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in.	$4.50	$5.25	$3.25	$5.05	$5.00	$7.75	$6.00
Channels, 3 to 15 in.	4.60	5.25	3.25	5.05	5.00	7.75	6.00
Angles, 3 to 6 in., ¼ in. thick	4.50	5.25	3.25	5.05	5.00	7.75	*6.00*
Tees, 3 in. and larger	4.50	5.30	3.30	5.05	5.05	7.75	*6.00*
Plates	10.00	10.00	4.00	10.05	10.00	10.00	9.00

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

		Warehouse				
	Mill. Pittsburgh	New York	Chicago	St. Louis	San Francisco	Dallas
¾ in. and larger	$5.25	$7.00	$5.50	$5.55	$7.15	$8.40
CONE HEAD BOILER						
¾ in. and larger	5.35	7.10	5.60	5.65	7.25	8.50
⅝ and 11/16	5.50	7.25	5.75	5.80	7.40	8.65
½ and 9/16	5.85	7.60	6.10	6.15	7.75	9.00

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply		2-Ply		3-Ply	
	c.l.	l.cl.	c.l.	l.cl.	c.l.	l.cl.
No. 1 grade	$1.25	$1.40	$1.45	$1.60	$1.75	$1.90
No. 2 grade	1.10	1.25	1.25	1.40	1.50	1.65

Asbestos asphalt-saturated felt (14 lb. per square) costs $6.50 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $1.85 per roll in carload lots and $2.10 for smaller quantities.

Shingles, red and green slate finish, cost $4.75 per square in carloads, $5 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York or Chicago:

	Carload Lots	Less Than Carload Lots
Tar felt (14 lb. per square of 100 sq.ft.)	**$61.00**	**$62.00**
Tar pitch (in 400-lb. bbl.)	15.00	16.50
Asphalt pitch (in barrels)	29.00	30.50
Asphalt felt	60.00	62.00

SHEETS—Price in cents per pound:

	Large Lots, Pittsburgh	St. Louis	Chicago	San Francisco	New York Sept. 1, 1917	New York One Yr. Ago
Blue Annealed						
No. 10	8.00 to 9.00	**10.05**	**10.00**	**11.00**	10.00	4.25
No. 12	8.05 to 9.05	**10.10**	**10.05**	**11.05**	10.05	4.30
No. 14	8.10 to 9.10	**10.15**	**10.10**	**11.10**	10.10	4.35
Black						
Nos. 18 and 10	7.80 to 8.80	**10.15**	**9.80**	**11.07**	10.30	3.45
Nos. 22 and 24	7.85 to 8.85	**10.20**	**9.85**	**11.12**	10.35	3.50
No. 26	7.90 to 8.90	**10.25**	**9.90**	**11.12**	10.40	3.55
No. 28	8.00 to 9.00	**10.35**	**10.00**	**11.37**	10.50	3.65
Galvanized						
No. 10	9.00 to 10.00	**10.95**	**10.70**	....	....	....
No. 12	9.10 to 10.10	**10.95**	**10.70**	12.15	....	4.10
No. 14	9.10 to 10.10	**10.95**	**10.70**	12.15	....	4.10
Nos. 18 and 20	9.40 to 10.40	**11.15**	**11.00**	12.45	11.40	4.40
Nos. 22 and 24	9.55 to 10.55	**11.30**	**11.15**	12.59	*11.55*	4.55
No. 26	9.70 to 10.70	**11.45**	**11.20**	12.74	*11.70*	4.70
No. 28	10.00 to 11.00	**11.75**	**11.50**	13.03	*12.00*	5.00

LINSEED OIL—These prices are per gallon:

	New York Sept. 1, 1917	New York One Year Ago	Cleveland Sept. 1, 1917	Cleveland One Year Ago	Chicago Sept. 1, 1917	Chicago One Year Ago
Raw in barrels	**$1.26**	$0.75	**$1.30**	$0.75	**$1.27**	$0.75
5-gal. cans	**1.36**	.85	**1.40**	.85	**1.37**	.85

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red Sept. 1, 1917 Dry	Red Sept. 1, 1917 In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White Sept. 1, 1917 Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	13.25	13.50	10.50	11.00	13.00	10.50
25- and 50-lb. kegs	13.50	13.50	10.75	11.25	13.25	10.75
12½-lb. keg	13.75	14.00	11.00	11.50	13.50	11.00
1- to 5-lb. cans	15.25	15.50	12.50	12.50	15.50	12.50

LUMBER*—Price per M in carload lots:

Square Edge and Sound Green

	Southern Pine New York 20 Ft. and Under	Southern Pine New York 22-24 Ft.	Southern Pine Chicago 20 Ft. and Under	Southern Pine Chicago 22-24 Ft.	Yellow Pine St. Louis 20 Ft. and Under	Yellow Pine St. Louis 22-24 Ft.
3x 4 to 8x 8	$33.75	$34.75	$31.75	$32.75	$28.75	$29.75
3x10 to 10x10	35.75	36.75	33.75	34.75	30.75	31.75
3x12 to 12x12	38.75	39.75	36.75	37.75	33.75	34.75
3x14 to 14x14	41.75	42.75	39.75	40.75	36.75	37.75
3x16 to 16x16	46.75	47.75	44.75	45.75	41.75	42.75
3x18 to 18x18	51.75	52.75	49.75	50.75	46.75	47.75
4x20 to 20x20	56.75	57.75	54.75	55.75	51.75	52.75

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

*Prices from Lumberman's Bureau.

Rough Douglas Fir, No. 1 Common—More than carload lots in San Francisco:

Size in Inches	15 Ft. and Under	16 to 24 Ft.	25 to 32 Ft.
3 and 4x4	**$23.00**	**$24.50**	**$25.50**
3 and 4x6 and 8	**23.00**	**23.50**	**24.50**
6x6 to 8x8	**23.50**	**24.50**	**24.50**
3 and 4x10	**23.00**	**24.50**	**25.50**
6 and 8x10	**24.00**	**25.00**	**25.00**
10x10	**24.00**	**24.00**	**26.00**
3 and 4x12	**24.00**	**24.50**	**25.50**
6 and 8x12	**24.50**	**23.50**	**23.50**
10 and 12x12	**24.00**	**24.00**	**26.00**
3 and 4x14	**24.00**	**26.00**	**27.00**
6 and 8x14	**25.50**	**26.50**	**26.50**
7 and 9x14	**26.50**	**27.50**	**27.50**
10 and 12x14	**25.00**	**25.00**	**27.00**
14x14	**24.00**	**24.00**	**26.00**
3 and 4x16	**25.00**	**27.50**	**28.50**
6 and 8x16	**27.00**	**28.00**	**28.00**
7 and 9x16	**28.00**	**29.00**	**29.00**
10 and 12x16	**26.00**	**26.00**	**28.00**
14 and 16x16	**24.00**	**24.00**	**26.00**
3 and 4x18	**26.00**	**29.00**	**31.00**
6 and 8x18	**27.50**	**30.00**	**30.00**
7 and 9x18	**28.50**	**31.00**	**31.00**
10 and 12x18	**27.00**	**27.00**	**29.00**
14 and 16x18	**25.00**	**25.00**	**27.00**
18x18	**26.00**	**26.00**	**28.00**
3 and 4x20	**28.00**	**30.50**	**32.50**
6 and 8x20	**29.50**	**32.00**	**32.00**
10 and 12x20	**28.00**	**28.00**	**30.00**
14 and 16x20	**26.00**	**26.00**	**28.00**
18 and 20x20	**27.00**	**27.00**	**29.00**

Yellow Pine—Dallas. Price per M:

2x4 to 2x12—12 to 16 ft. long	$32.50
2x4 to 2x12—10, 18 and 20 ft. long	35.00
2x4 to 2x12—22 and 24 ft. long	37.50
4x4, 4x6, 6x6, 8x8, 3x8	37.50
8x10, 10x10, 3x10	40.00
12x12, 3x12	40.00

	1-In. Rough, 10 In. x 16 Ft. and Under Y.P.	1-In. Rough, 10 In. x 16 Ft. and Under Fir	1-In. Rough, 10 In. x 16 Ft. and Under Hemlock	2-In. T. and G. 10 In. x 16 Ft. Y.P.	2-In. T. and G. 10 In. x 16 Ft. Fir
Kansas City	$44.00	$44.50	$43.00	$52.00	....
New Orleans	38.00	....	....	36.00	....
Denver	....	30.00	30.00	....	$30.00

	8 x 8-In. x 20 Ft. and Under Y.P.	8 x 8-In. x 20 Ft. and Under Fir	8 x 8-In. x 20 Ft. and Under Hemlock	8 x 8-In. x 20 Ft. and Under Spruce	12 x 12-In., 20 Ft. and Under Y.P.	12 x 12-In., 20 Ft. and Under Fir
Kansas City	$39.00	$35.00	$35.00	....	$45.00	$35.00
New Orleans	28.00	....	....	....	38.00	....
Denver	....	30.00	....	*$27.50*	....	32.00

Note—In Los Angeles only fir, hemlock and redwood used. Hemlock base is $35; fir is $30. In Boston the lumber market is demoralized.

NAILS—The following quotations are per keg from warehouse:

	Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	$4.00	*$4.00*	$4.45	$4.60	$4.45
Cut	4.65	5.00	4.60	6.15	....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	21.5	New Orleans	30.7
Buffalo	11.6	New York	19.5
Chicago	18.9	Pacific Coast (all rail)	75.0
Cincinnati	15.8	Philadelphia	18.5
Cleveland	10.5	St. Louis	23.6
Denver	68.6	St. Paul	32.9
Kansas City	43.6		

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. barrel	$0.045	....
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.03	$0.0375 to .04
Soda ash, in 400-lb. bbl.	.05	.0375 to .04
Liquid chlorine (spot orders)	.175	.16 to .18

Lime is quoted separately, on next page.

CONTRACTORS' MISCELLANEOUS SUPPLIES

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Sept. 1, 1917	One Month Ago	One Year Ago
$4.50 to $5.00	$4.50 to $5.00	$2.50

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York	St. Louis	Chicago	San Francisco
Galvanized	10—2½%	10—2½%	10—2½%	15%
Bright	20—2½%	20—2½%	20—2½%	10%

MANILA ROPE—For rope smaller than ¾-in. the price is ¼ to ½c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅝-in., 8 ft.; ¾-in., 6; ⅞-in., 4½; 1-in., 3⅓; 1⅛-in., 2 ft. 10 in.; 1¼-in., 2 ft. 4 in. Following is price per pound for ¾-in. and larger, in 1200-ft. coils:

Boston	$0.34	Kansas City	$0.31½
New York	.33½	New Orleans	.31
Chicago	.31½	Los Angeles	.30
Denver	*.34*		

EXPLOSIVES—Price per pound in 200-lb. lots at cities named:

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	Gelatin 80%
New York	......	$0.26½	$0.33½	......
Boston	......	......	.33¼	$0.40¾
Kansas City	$0.19	.25¼	.32¼	.42¼
New Orleans	......	.24¼	.29¼	......
Los Angeles	.19	.25	.32¼	......
Chicago	.18¾	.22¾	.32⅛	.42
St. Louis	*.15¼*	*.19¼*	*.28½*	.38½
Denver	.18	.24¼	.31¼	.41¼
Dallas	.24	.28	.38	.48

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York Sept. 1, 1917	New York One Month Ago
Heavy melting steel scrap	*$27.50* to *28.50*	$29.00
No. 1 railroad wrought	*39.00* to *40.00*	42.00
Stove plate	*18.00* to *20.00*	20.00
No. 1 machinery cast	*30.00* to *31.00*	34.00
Machine shop turnings	*16.00* to *18.00*	18.00
Cast borings	**19.00** to **20.00**	18.00
Railroad malleable cast	*30.00* to *32.00*	33.00

	Chicago Sept. 1, 1917	Chicago One Month Ago
No. 1 railroad wrought	**$36.00**	$35.00
Stove plate	*17.25* to *18.00*	18.50
No. 1 machinery cast	*25.00* to *26.00*	28.50
Machine shop turnings	17.00 to 17.50	17.00
Cast borings	17.00 to 17.50	17.50
Railroad malleable cast	**30.00** to **32.00**	29.00

	St. Louis Price Delivered Sept. 1, 1917	St. Louis Price Delivered One Month Ago
Heavy melting steel scrap	*$30.00* to *30.50**	$37.00
No. 1 railroad wrought	*33.00* to *33.50*	36.00
Stove plates	*16.50* to *17.00*	18.00
No. 1 machinery cast	*23.00* to *23.50*	25.00
Machine shop turnings	*14.50* to *15.00*	19.00
Cast borings	*14.00* to *14.50*	17.50
Railroad malleable cast	*27.00* to *27.50*	29.50

*Per gross ton.

Proposals

For Proposals Advertised See Pages 87 to 92 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Sept. 10.	**Cumberland, Md.** Adv. Aug. 16 to 30.	Aug. 16
Sept. 10.	Tonawanda, N. Y. Adv. Sept. 6.	Sept. 6
Sept. 11.	**New York, N. Y.** Adv. July 12 to Aug. 23.	July 12
Sept. 12.	**Kansas City, Mo.** Adv. Aug. 23 and 30.	Aug. 23
Sept. 13.	Cleveland, O.	Aug. 30

SEWERS

Sept. 11.	Montclair, N. J. Adv. Sept. 6.	Sept. 6
Sept. 11	Clinton, Ia.	Sept. 6
Sept. 11.	Oklahoma, Okla.	Sept. 6
Sept. 15.	Hillsboro, Ill.	Aug. 16
Sept. 12.	Springfield, Ohio	Sept. 6
Sept. 17.	Cleveland Heights, O.	Aug. 30

BRIDGES

Sept. 8.	Martinsburg, W. Va.	Sept. 6
Sept. 10.	Omaha, Neb.	Aug. 23
Sept. 10.	Akron, O.	Aug. 23
Sept. 10.	Bryan, O.	Aug. 30
Sept. 10.	Scarsdale, N. Adv. Sept. 6.	Sept. 6
Sept. 11.	Lynn, Mass. Adv. Sept. 6	Sept. 6
Sept. 11.	Modesto, Cal.	Aug. 30
Sept. 11.	Bradentown, Fla.	Aug. 16
Sept. 12.	Youngstown, Ohio	Sept. 6
Sept. 13.	Excelsior Springs, Mo	Aug. 30
Sept. 15.	Guthrie Okla.	Aug. 30
Sept. 15.	Jacksonville, Ore.	Sept. 6
Sept. 17.	Woonsocket, R. I. Adv. Sept. 6.	Sept. 6
Sept. 18.	Santa Ana, Cal.	Sept. 6
Sept. 20.	Du Bois, Pa.	Sept. 6
Sept. 20.	Butler, Pa. Adv. Sept. 6.	Sept. 6
Oct. 2.	Albany, N. Y. Adv. Sept. 6.	Sept. 6

STREETS AND ROADS

Sept. 10.	Washington	Aug. 30
Sept. 10.	Wallace, Idaho	Aug. 30
Sept. 10.	Cherokee, Ia.	Sept. 6
Sept. 10.	Mankato, Minn.	Sept. 6
Sept. 10.	Louisa, Ky.	Sept. 6
Sept. 10.	Trenton, N. J.	Sept. 6
Sept. 10.	Quincy, Mass.	Sept. 6
Sept. 11.	Concordia, Kan.	Sept. 6
Sept. 11.	Sacramento, Cal.	Aug. 30
Sept. 11.	Buffalo, Minn.	Sept. 6
Sept. 12.	Kansas City, Mo	Sept. 6
Sept. 12.	Springfield, Ohio	Sept. 6
Sept. 12.	Indianapolis, Ind.	Sept. 6
Sept. 12.	Rhode Island Adv. Sept. 6.	Sept. 6
Sept. 14.	Parkersburg, W. Va.	Sept. 6
Sept. 15.	Visalia, Cal.	Aug. 30
Sept. 16.	Pocatello, Idaho	Sept. 6
Sept. 17.	Indianapolis, Ind.	Sept. 6
Sept. 18.	Morrison, Ill.	Sept. 6
Sept. 19.	Seattle, Wash.	Aug 23
Sept. 18.	Hohenwald, Tenn.	Aug. 23
Sept. 20.	Albany, N. Y. Adv. Sept 6.	Sept. 6
Sept. 20.	New York, N. Y.	Sept. 6
Sept. 21.	Charleston, W. Va.	Sept. 6
Sept. 22.	Cameron, La.	Aug. 30
Sept. 24.	Eutaw, Ala.	Sept. 6
Sept. 24.	Livingston, Ala.	Sept. 6
Sept. 25.	Carrollton, Ala.	Sept. 6
Sept. 30.	Indianapolis, Ind.	Sept. 6
Oct. 1.	Lincoln, Neb.	Sept. 6
Oct. 16.	Cape May, N. J.	Sept. 6

EXCAVATION AND DREDGING

Close Bids		News-Record See Eng.
Sept. 10.	Walker, Minn.	Aug. 30
Sept. 10.	Walker, Minn.	Sept. 6
Sept. 10.	Carrollton, Ia.	Sept. 6
Sept. 12.	New York, N. Y.	Sept. 6
Sept. 12.	New Orleans, La.	Aug. 23
Sept. 12.	Hampton, Ia.	Aug. 30
Sept. 15.	Angola, Ind.	Sept. 6
Sept. 18.	Moorhead, Minn.	Sept. 6
Sept. 21.	Modesto, Cal.	Sept. 6
Sept. 21.	Paxton, Ill.	Sept. 6
Oct. 2.	St. Cloud, Minn.	Aug. 2
Oct. 2.	Urbana, Ill.	Sept. 6

INDUSTRIAL WORKS

Sept. 12.	Ogdensburg, N. Y. Adv. Sept 6.	Sept. 6

BUILDINGS

Sept. 7.	Albany, N. Y. Adv. Aug. 16 to Sept. 6.	Aug. 23
Sept. 10.	Bridgeport, Conn.	Aug. 30
Sept. 10.	Akron, O.	Aug. 30
Sept. 10.	El Paso, Tex.	Sept. 6
Sept. 10.	Crawfordsville, Ind.	Sept. 6
Sept. 12.	Virginia, Minn.	Sept. 6
Sept. 13.	Upper Sandusky, Ohio	Aug. 30
Sept. 13.	Letts, Ia.	Sept. 6
Sept. 15.	Oklahoma, Okla.	Aug. 16
Sept. 15.	**Spirit Lake, Ia.**	Aug. 9
Sept. 15.	Bathhurst, N. B.	Aug. 30
Sept. 15.	Cleveland Heights, Ohio (Warrensville P. O.)	Sept. 6
Sept. 21.	Chester, Pa.	Sept. 6

FEDERAL GOVERNMENT WORK

Sept. 10.	Annapolis, Md.	Aug. 30
Sept. 10.	Pearl Harbor Hawaii	Aug. 30
Sept. 10.	Norfolk, Va.	Sept. 6
Sept. 10.	Philadelphia, Pa.	Sept. 6
Sept. 10.	Detroit, Mich.	Sept. 6
Sept. 11.	Vicksburg, Miss. Adv. Sept. 6.	Sept. 6
Sept. 12.	Vicksburg, Miss. Adv. Sept. 6.	Sept. 6
Sept. 12.	Raton, N. M.	Aug. 23
Sept. 12.	Long Island City, N. Y.	Aug. 9
Sept. 17.	Tampa, Fla.	Sept. 6
Sept. 12.	Wilmington, Del.	Sept. 6
Sept. 24.	Farmington, N. M.	Sept. 6
Sept. 26.	Memphis, Tenn. Adv. Sept. 6.	Sept. 6
Oct 30.	Key West, Fla. Adv. Sept. 6.	Sept 6
Oct 1.	Cleveland, Ohio	Sept. 6
Oct 2.	San Francisco, Cal.	Sept. 6
Oct 4.	St. Peter, Minn.	Sept. 6
Sept. 18.	Cape Henry, Va. Adv. Aug. 30 and Sept 6.	Aug. 30
Sept. 21.	Kendallville, Ind. Adv. Aug. 16 and 23.	Aug. 16
Sept. 25.	Washington, D. C. Adv. Aug. 30.	Aug. 30
Oct. 1.	Twin Falls, Idaho	Aug. 30

MISCELLANEOUS

Sept. 8.	Creek Improvements—Lancaster, O.	Sept. 6
Sept. 10.	Dam and Retaining Walls—Marshalltown, Ia.	Aug. 30
Sept. 10.	Retaining Wall—Lebanon, O.	Aug. 30
Sept. 10.	Dock—Georgetown, Wash.	Aug. 30
Sept. 10.	Piling—Columbus, O.	Sept. 6
Sept. 10.	Dock—Seattle, Wash.	Sept. 6
Sept. 10.	Garbage Incinerator—Waukegan, Ill. Adv. Sept. 6.	Sept. 6
Sept. 11.	Electric Work — Farmingdale, N Y. Adv. Sept. 6.	Sept. 6
Sept. 12.	Freight Conveyors — Albany, N. Y. Adv. Sept. 6.	Sept. 6
Sept. 17.	Retaining Wall — Newton, N. J.	Sept. 6
Sept. 19.	Flood Protection—Corning, N. Y. Adv. Sept. 6.	Sept. 6
Sept. 20.	Retaining Wall — Dayton, O.	Sept. 6
Sept. 25.	Harbor Improvements — Mobile, Ala.	Sept. 6

Where name of official is not given, inquiries should be addressed to City [illegible] County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., Hempstead—Town sold $,000 bonds to build waterworks system in North Hempstead. C. E. Remsen, superv.

N. J., Little Falls—(Official)—City rejected bids building pumping station. B. A. Stanley, supt. Noted Aug. 23.

O., Hubbard—Village sold $12,000 bonds to build waterworks system. W. H. Willard, supt.

Kan., Junction City—City Comrs. plan to extend water main on West 10th and East Chestnut Sts., also 6-in. line on Calhoun St. to connect dead ends.

Kan., Towanda—City having plans prepared by F. E. Devlin, engr., Eldorado, for building waterworks system.

S. D., Centerville—(Official)—City defeated $20,000 bond issue to install waterworks system. Noted Aug. 16.

Okla., Coyle—(Official)—City sold $13,000 bonds to improve waterworks system. W. Erkman, clk. Noted Aug. 23.

Okla., Dewar—(Official)—City sold $20,000 bonds to extend water-works. Noted Aug. 23.

Okla., Oklahoma — (Official) — City will not spend $10,000 to build waterworks and connecting wells. J. W. Bennett, supt. Noted Aug. 23.

Colo., Greeley—(Official)—City sold $150,000 bonds to build water-works system. W. A. Hotchkiss, clk.

Idaho, Sandpoint—City plans to build water-works system. M. Henderson, supt.

Wash., Waitsburg—City voted $50,000 bonds to build waterworks system. Noted Aug. 2.

B. C., Vancouver—City having plans prepared extending water mains 20,000-ft. to Roche Point to serve Robert Dollar plant. About $26,000. J. L. Breckon, supt.

BIDS DESIRED

N. Y., Tonawanda—(Official)—Until Sept. 26, by M. W. Simson, city clk., furnishing and laying intake pipe in Niagara River, advertised in this issue. Noted Apr. 19.

N. J., East Orange—Until Sept. 10, by Bd. Water Comrs., for laying water mains. R. M. Roper, 436 Main St., act. secy.

PRICES AND CONTRACTS AWARDED—

(★Indicates award of contract)

★Pa., Loretto—Bethlehem Steel Co., South Bethlehem, let contract building reservoir and observation tower to Richardson Constr. Co., Connell Bldg., Scranton, $100,000.

★Md., Cumberland—(Official)—City let contract 7,000,000 gal. reservoir in Ridgedale Addition to Cumberland Contr. Co., Cumberland, $67,545. Noted Aug. 2.

★Va., Leshall—Newport News Light & Water Co., Newport News, let contract filter plant to Roberts Filter Mfg. Co., 6th St. and Columbia Ave., Darby, $500,000.

★O., Akron—(Official)—City let contract laying 7200-ft. of 30-in. c.i. pipe with connections and lines, constructing manholes, replacing paving and appurtenant work to Gessner Co., Toledo, $32,608.

★Ill., Chicago—City let contract building deep well to B. Geiger, 37 West Van Buren St., $23,737. Noted Aug. 9.

★Wis., Clintonville—(Official)—City let contract laying 4000-ft. water mains to Meirswa Constr. Co., Oshkosh, $2.40 for 6-in. main and $2.08 for 4-in.

★Minn., Lake Crystal—Village let contract, water mains to A. Larson, Lake Crystal, $30,000.

★Mont., Glasgow—(Official)—City let contract improving water and sewerage systems to Empire Constr. Co., Minot, as follows: 6-in. c. i. pipe, $2.85 per ft., specials, 10c. per lb. hydrants, $85 each gate valves, $50 each, 10-in. vitr. pipe, $1.65 per ft., manholes, $70 each, catchbasins, $75 each, flush tanks, $210.

Water- orks (Continued)

★M Monett—(Official)—City let contract iding 1,000,000-gal. rein.-con reservoir t M. E. Gillioz, Monett, without roof, $14,59 with roof, $18,464. Noted Aug. 23.

Col Otis—(Official)—City received low bid bu ding water-works system, including deep w l, wrought-iron water pipe, castings, tees, vated tank and tower, from Gordon & Su lok Constr. Co., Century Bldg., Denv $20,000. Noted Aug. 23.

SEWERS

Proposed Work

Mass., East Boston—(Boston P. O.)—Dept. Pub. Wks., Boston, soon lets contract sewer in Faywood Ave. E. F. Murphy, comr.

O., Dayton—City plans to improve Sanitary Sewer Dist. No. 3, portions Alton and Baltimore Sts. and Notre Dame Ave. F. O. Eichelberger, city engr.

O., Mansfield—City plans improving Bartley Ave. by building 8-in. sanitary sewer, including flush tanks and manholes. W. J. Hazelton, city engr.

O., Toledo—City plans election in November to vote on $3,000,000 bond issue to build sewage plant. H. McKechnie, city engr.

Ia., Des Moines—City Council plans to build sewerage system to connect Des Moines with Valley Junction. About $300,000. Karl Kastberg, city engr.

Kan., Pittsburg—City having plans prepared by Black & Veatch, engrs., 507 Interstate Bldg., Kansas City, Mo., building sewage disposal plant. About $75,000. Noted May 17.

Neb., Omaha—(Official)—City to sell $20,000 bonds to build sewers. J. A. Bruce, city engr. Noted Aug. 23.

Okla., Boynton—Council passed ordinance authorizing $20,000 bond issue to build sewerage system. J. F. Wolfinger, chn.

Okla., Sentinel—(Official)—City defeated $15,000 bonds for improving sewerage system. Noted July 12.

Ore., Portland—City having plans prepared for building East 63rd and Halsey Sts. sewerage system to care for Rose City Park Dist. About $163,000. P. H. Dater, city engr.

Cal., Los Angeles—City having plans prepared installing sewers in East Hollywood Dist. A. C. Hansen, city engr.

Cal., San Diego—City plans sewerage system involving 18-mi. concrete pipe from 6- to 20-in. at Camp Kearny. G. Cromwell, city engr.

BIDS DESIRED

N. J., Montclair—(Official)—Until Sept. 11 by H. Trippett, town clk., storm sewer portion Church St.; advertised in this issue.

O., Springfield—Until Sept. 12, by City, installing sewers in Linwood, Columbus, Water and Mt. Vernon Sts. C. E. Ashburner, city mgr.

Ia., Clinton—(Official)—Until Sept. 11 by City Clk., building sanitary sewer in portions 11th Ave. J. G. Thorne, city engr.

Okla., Oklahoma—Until Sept. 11, by C. F. Semmelbeck, city clk., building lateral sewerage system. G. V. McClure, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., New Canaan — (Official) — City let contract building filter beds, and sewage disposal plant to E. W. Schreve, Bridgeport, $14,960.

★Conn., Orange—Town let contract building sanitary sewers in Prospect Beach Sect. to Acme Eng. Co., Hartford. Noted May 31.

N. Y., Long Island City—(Official)—Bids were received by M. M. Connolly, boro. pres., Aug. 29, for sewers and appurtenances in (a) Junction Ave., (b) Sackett St., (c) Guion Ave., (d) North Villa St., (e) Fulton Pl. and North Morris Ave., (f) Myrtle Ave., as follows: Ajax Drainage Contg. Corp., 60 Herkimer St., Bklyn., (a) $37,933, (b) $30,880, (d) $29,952, (e) $15,603; Peace Bros., 20 Main St., Flushing, (a) $31,417, (b) $26,964, (e) $15,353; Murphy Bros., 262 Bay 43rd St., Bklyn., (c) $15,556, (f) $21,766; Green Contg. Co., 734 Verona Ave., (b) $21,605; J. L. Sigretto, 1459 Woodhaven Ave., Woodhaven, (e) $14,377. Noted Aug. 23.

★N. J., Avalon—Boro. let contract building lateral sewer to Seaman & Letsnus, Stone Harbor, $10,000.

★Pa., Waynesboro—City let contract storm sewers to H. K. Gerhart, Waynesboro, $10,000.

★O., Ashland—See "Streets and Roads."

★Ind., Gary—City let contract building sewer in Dist. No. 38 to J. Apostle, Gary, $11,822. Noted June 28.

★Ia., Conrad—City let contract building sewers to Cole Bros., Ames, $16,840.

★Ia., Council Bluffs—(Official)—City let contract installing sewers to E. A. Wickham & Co., 19 Scott St., $1.10 for 10-in. sewer, 98c. for 8-in., 67c. for 6-in. and 45c. for manholes.

★Ia., Marshalltown—(Official)—City let contract building sanitary sewer to Anderson & Empire, Marshalltown, $20,000. Noted Aug. 23.

★Ia., Milford—City let contract building 4½-mi. 8-15-in. sewers to R. N. Kruse, Spencer, $39,014. Noted Aug. 9.

★S. D., Watertown—City let contract sewers in 2nd, 3rd, 4th, 5th and 6th Sts. to W. M. Danforth, 707 Germania Life Bldg., St. Paul. About $16,900.

★Mont., Glasgow—See "Waterworks."

★Tex., San Antonio—(Official)—City let contract sewage pumping plant to McKenzie Constr. Co., 605 Bedell Bldg., $30,000. Noted July 19.

★Okla., Commerce—City let contract laying 6, 8, 10 and 12-in. pipe and building sewage disposal plant to Municipal Excavator Co., 200 East Main St., Oklahoma. $24,000 and $2500 respectively. Noted July 12.

★Cal., Los Angeles — See "Streets and Roads."

BRIDGES

Proposed Work

Me., Bath—State Highway Comn., Cumberland and Sagadahoc Cos., plan bridge over New Meadows River. About $13,000.

N. J., New Brunswick—A. Fox, Middlesex Co. engr. preparing plans for new draw bridge over Raritan River, Albany St.

Pa., Norristown—Montgomery and Chester Cos. plan to improve inter-county bridge over Schuylkill River, between iron borough and Mont Clare.

Ga., Savannah — Savannah - Altamaha Bridge Co., recently incorporated with $100,000 capital stock, plans to build bridge from Savannah across Altamaha River. Address M. B. Lane, 26 Gaston St. Noted July 19.

Fla., Bradentown—See "Streets and Roads."

Fla., Miami—See "Streets and Roads."

Fla., West Palm Beach—See "Streets and Roads."

Tenn., Knoxville — City sold $150,000 bonds to build viaduct and approaches. Southern Ry. will bear part of cost of work. J. B. McCalla, city engr. W. H. Wells, Wash., D. C., ch. engr. ry.

Tenn., Memphis—City sold $25,000 bonds to build wagonway and approaches to J. T. Harahan bridge. J. H. Weatherford, city engr.

O., Lorain—Council plans traffic bridge over Black River in southern part of city. C. M. Osborne, city engr.

Wis., Prairie du Chien—Prairie du Chien & Wyalusing Bridge Co. rejected bids building 700-ft. rein.-con. toll bridge over Wisconsin River. About $50,000. J. H. Brantz, St. Paul and Manakota, Minn., engr. Noted Aug. 23.

Minn., Walker—Cass Co. Comrs. authorized $11,000 bond issue to build bridges.

Mo., Liberty—See "Streets and Roads."

Tex., Beaumont—Chamber of Commerce and City Council plan to build new toll bridge over Neches River. About $200,000. C. L. Scherer, city engr.

Okla., Atoka—Atoka Co. voted $30,000 bonds to build bridges and roads. Noted Aug. 9.

BIDS DESIRED

Mass., Lynn—(Official)—Until Sept. 11 by R. J. Newsom, supt. water and water works, City Hall, rein.-con. bridge and approaches on Ipswich River Sta.; advertised in this issue.

R. I., Woonsocket—(Official)—Until Sept. 17, Bd. Aldermen, building rein.-con. bridges, Contr. Nos. 1, 2 and 3; advertised in this issue.

N. Y., Albany—(Official)—Until Oct. 2, by W. W. Wotherspoon, supt. pub. wks., Capitol, constructing bascule bridge below Lock No. 1, Culvert St., Phoenix, Oswego Canal, Sect. 1, Contract No. 167; advertised in this issue.

N. Y., Scarsdale—(Official)—Until Sept. 10, by Bronx Pkway Comn. J. Downer, engr. secy., 2 rein.-con. arch bridges, Contr. No. 24; advertised in this issue.

Pa., Butler—(Official)—Until Sept. 20 by Pennsylvania Pub. Ser. Comn., Harrisburg, steel bridge with concrete abutments on Main St.; advertisted in this issue.

Pa., Du Bois—(Official)—Until Sept. 20, by City, for bridge over Sandy Lick Creek on Brady St. About $15,000. G. A. Flink, 301-3 Commonwealth Trust Bldg., Harrisburg, engr.

W. Va., Martinsburg—(Official)—Until Sept. 8 by Berkely Co. building 80 ft. rein.-con. bridge over Opequon Creek.

Ala., Carrolton—See "Streets and Roads."

O., Youngstown—(Official)—Until Sept. 12, by Dir. of Pub. Ser., improving east approach to East Federal St. bridge, building temporary trestle and paving viaduct, wood block. F. M. Lillie, city engr.

Ore., Jacksonville—(Official)—Until Sept. 15, by Jackson Co. Court, 126-ft. wooden bridge over Big Applegate River. G. A. Gardner, clk. Noted Aug. 16.

Cal., Santa Ana—Until Sept. 18, by Bd. Superv. Orange Co., rein.-con. bridge on Hiatt St., ¼ mi. south La Habra.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—See "Streets and Roads."

★N. Y., Albany — (Official) — W. W. Wotherspoon, supt. pub. wks., let contract highway bridge over Lock 27, Clyde River, Barge Canal Contr. No. 148, Lyons, to Lathrop, Shea & Henwood, Ellicott Sq., Buffalo, $68,770. Noted July 26.

N. Y., Albany—(Official)—W. W. Wotherspoon, supt. pub. wks., received low bids substructure, superstructure and approaches of bascule bridge over Tonawanda Creek, Tonawanda and North Tonawanda, Barge Canal Contr. No. 147, from Scherzer Rolling Lift Bridge Co., Monadnock Blk., Chicago, $233,986; Lupfer & Remick, Ellicott Sq., $239,820; Lathrop, Shea & Henwood, Ellicott Sq., $257,046, both of Buffalo. Noted July 26.

★N. Y., Utica—Bd. of Contr. let contract rein.-con. bridge over Reals Creek on Trenton Ave. to Wm. F. Cogley, Utica, $11,436.

★Va., Covington—Alleghany Co. let contract concrete bridges to Carpenter & Major, Clifton Forge, $33,000.

★S. C., Camden—(Official)—Kershaw Co. let contract building bridge over Wateree River to Austin Bros., 156 Greenwood Ave., Atlanta, Ga., $93,000. Noted Aug. 23

★Mich., Iron River—City let contract concrete bridge over Iron River on Genesee St. to B. W. Hicks, Norway, and J. W. Hoose, Iron Mountain, about $25,000.

★Kan., Kansas City—City and Leeds Ry. let contract rein.-con. bridge over Blue River, 3 spans 320 ft. long and 80 ft. wide to Clinton Constr. Co., 310 Mass Bldg.

Mo., St. Louis—(Official)—City received low bids building rein.-con. bridge over Broadway at Bellerive Park from Herclotz & Herchert, $64,496; Hoffman Bros., Constr. Co., $68,936; Woerman Constr. Co., 5351 Delmar Blk., $75,739. Noted Aug. 23.

★Ark., Arkansas City — Desha Co. let contract new draw lift span in Missouri Pacific Ry. Bridge over Arkansas River to Missouri Valley Bridge Co., Central Ave. and Kaw River, Kansas City, Mo.

★Ark., Augusta—See "Streets and Roads."

★Tex., Dallas—See "Streets and Roads."

★Wash., South Bend—Comrs. Pacific Co. let contract 3 rein.-con. bridges, Luten design, to C. G. Huber, Central Bldg., Seattle, $22,553. Noted July 26.

★Wash., Spokane—(Official)—Spokane Co. Comrs. let contract steel bridge over Spokane River, Harvard Rd. to Illinois Steel Bridge Co., 208 South La Salle St., Chicago, $37,488. Noted Aug. 16.

★Ore., Canyon City—City let contract replanking 2 concrete bridges to Coast Bridge Co., Ry. Ex. Bldg., Portland, $12,800.

★Ore., St. Helens—Columbia Co. let contract 10 rein.-con. bridges over Beaver Creek to L. O. Herrold, Portland, $36,959.

★Cal., Los Angeles—Bd. Pub. Wks. let contract rein.-con. bridge over tracks of Pacific Electric Ry. at West Blvd. and Sherman Way to W. M. Ledbetter, 1533 Western Ave., $24,957.

★Cal., Rio Vista—Bd. Supervs. Sacramento Co., Sacramento, and Solano Co., Fairfield, let contract bascule bridge over Sacramento River to Tibbitts-Pacific Co., 16 California St., San Francisco, $164,568. Noted Aug. 30.

Bridges (Continued)

Cal., Sacramento — (Official) — State Highway Comn., 515 Forum Bldg., Sacramento, received bids, Aug. 20, Cottonwood Creek Bridge on State Highway in Shasta Co., Div. 2, Route 3, from Tieslau Bros., $28,850; Duncanson-Harrelson Co., Chronicle Bldg., $36,484; A. H. Vogt, Sharon Bldg., $37,930, all of San Francisco. Noted Apr. 19.

★**Cal., Stockton**—City Council let contract constructing 54-in. concrete culvert in bed of Miner Channel to Frank C. McIntyre, Stockton. About $28,480.

STRUCTURAL STEEL WORK

Proposed Work

Ga., Savannah—See "Bridges."
Tenn., Knoxville—See "Bridges.
Tean., Memphis—See "Bridges."
O., Lorain—See "Bridges."
Minn., Walker—See "Bridges."
Tex., Beaumont—See "Bridges."
Okla., Atoka—See "Bridges."

BIDS DESIRED

Pa., Butler—See "Bridges."
Pa., Du Bois—See "Bridges."
O., Youngstown—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Albany—See "Bridges."
★**Ark., Arkansas City**—See "Bridges."
★**Wash., Spokane**—See "Bridges."

REINFORCED CONCRETE

Proposed Work

Tenn., Jackson—See "Industrial Works."
Wis., Prairie Du Chien—See "Bridges."
Ore., Baker—See "Miscellaneous."
Cal., Los Angeles—See "Industrial Works."
Cal., San Diego—See "Sewers."

BIDS DESIRED

R. I., Woonsocket—See "Bridges."
Mass., Lynn—See "Bridges."
N. Y., Scarsdale—See "Bridges."
N. J., Newton—See "Miscellaneous."
W. Va., Martinsburg—See "Bridges."
O., Dayton—See "Miscellaneous."
Cal., Santa Ana—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Utica**—See "Bridges."
★**Va., Covington**—See "Bridges."
★**Ill., Galesburg**—See "Industrial Works."
★**Mich., Iron River**—See "Bridges."
★**Kan., Kansas City**—See "Bridges."
★**Mo., Kansas City**—See "Bridges."
★**Mo., Monett**—See "Water-Works."
Mo., St. Louis—See "Bridges."
★**Ark., Augusta**—See "Streets and Roads."
★**Wash., South Bend**—See "Bridges."
★**Ore., St. Helens**—See "Bridges."
★**Cal., Los Angeles**—See "Bridges."
★**Cal., Los Angeies**—See "Streets and Roads."
Cal., Sacramento—See "Bridges."
★**Cal., Stockton**—See "Bridges."

STREETS AND ROADS

Proposed Work

Massachusetts—State Highway Comn., 212 State House, Boston, rejected bids paving Littleton highway. New bids. Noted Aug. 30.

Massachusetts — (Official) — State Highway Comn., Boston, received no bids building 4400-ft. state highway in Kingston. Noted Aug. 23.

N. J., Camden—City Council plans widening State St. and paving alleys in rear of Belleview and Kaighn Aves., concrete. L. E. Farnham, city engr.

N. J., Garwood—City Council plans macadamizing, curbing and guttering Centre St. and Hemlock, Hazel, Pine, Beach, Locust and Myrtle Aves. Address A. Conklin, mayor.

N. J., Jersey City—City Council plans paving West Side St., granite block pavement. C. Van Kuren, city engr.

N. J., Morristown—Oak Ridge Co. & Mountain Lakes Assn., Morris Co., plans to improve several streets and roads, including drainage. About $25,000.

N. J., Newark—Bd. Pub. Wks. plans to improve Paterson-Hamburg Turnpike. About $186,500. M. R. Sherrard, city engr.

N. J., Paterson—Bd. Pub. Wks. plans to pave East Main St., concrete, Grand St., bituminous concrete. A. V. Livingston, clk. H. J. Hardjes, city engr.

N. J., Union—Town plans to pave 18th and 19th Sts., and Lincoln Pl. T. F. Bowe, city engr.

Va., Front Royal—Bd. Supervs. of Warren Co. sold $10,000 bonds to build public road from Browntown to Bentonville, South River Dist.

W. Va., Stealey Heights—(Clarksburg, P. O.)—Town election Sept. 11, to vote on $20,500 bond issue to improve and pave Davis St. and Duncan Ave. L. D. Mitchell, mayor.

N. C., Bridgetown—Council passed ordinance to issue $12,000 bonds to pave portions Bridge St., brick. I. Lewis, clk.

N. C., Clinton—Sampson Co. Comrs. plan $75,000 bond issue to improve roads.

N. C., Yanceyville—Caswell Co. Comrs. plan to issue $85,000 bonds to build roads; one to connect Yanceyville and Danville, Va.

Fla., Bradentown—Manattee Co. plans to vote on $115,000 bond issue for road and bridge work.

Fla., Miami—Dade Co. voted $140,000 bond issue for roads and bridges. Hobart Crabtree, engr. Noted Aug. 16.

Fla., West Palm Beach—Palm Beach Co. Comrs. soon lets contract following improvements in Lake Worth: Paving 2 mi. road, $75,000; building 2100-ft. seawall, $25,000; building bridges, $25,000. Address H. C. Fugate and Z. F. Potter.

Miss., Tunica—Tunica Co. Comrs. rejected bids building 41-mi. gravel road. New bids. Noted July 26.

Tenn., Memphis—City Comn. voted to recurb and repave portion Union Ave., asphalt, opening 3rd St., building new street between Union and Beale Aves.; also to recurb and repave portion Front St., $15,189. J. H. Weatherford, city engr.

Ky., Henderson—City soon receives bids paving, curbing and guttering Adams and Alvasia Sts. W. Hopkins, city engr.

O., Batavia—Clermont Co. sold $21,350 bonds to improve roads. C. S. Earles, aud. Noted Aug. 16.

O., Bryan—Williams Co. to sell $117,500 bonds, Sept. 8, to improve roads. G. C. Beucler, co. aud.

O., Cleveland—Cuyahoga Co. plans widening portion Harvard Rd. W. A. Stinchcomb, co. engr.

O., Cleveland—City plans paving and improving portions West 32nd, Altoona, Ashland, Peach, West 44th, West 68th, Hodgson, Dover, Almira, Cobb, West 95th, East 100th Sargent, Atticue, Pennant and Maxim Sts. E. Hoffman, city engr.

O., Columbus—(Official)—Citizens voted $5,000,000 bonds to improve streets. H. Maetzel, city engr. Noted Aug. 9.

O., Tiffin—Seneca Co. will sell $23,000 bonds to improve roads. J. E. Hershberger, co. aud.

Ind., Crown Point—Lake Co. to sell $48,000 bonds Sept. 10 to improve roads. M. J. Brown, co. treas.

Ill., Lockport—Citizens voted to macadamize, curb and gutter portion 9th St.; also macadamize State St. About $14,000.

Ill., Springfield—Sangmon Co. plans to hard surface 41-mi. roads. About $1,000,000. E. H. White, co. highway supt.

Wis., Janesville—Janesville Co. plans to build road from here to Beloit, 1½-mi. with state aid. C. Moore, co. highway comr.

Wis., Park Falls—City voted $30,000 bond issue to pave streets.

Wis., Stevens Point—City plans $17,000 bond issue to improve streets.

Wis., West Allis—Bd. Pub. Wks. soon receives bids grading 50th, 52nd, 53rd and 54th Aves. E. G. Orbert, city engr.

Ia., Davenport—City Council plans $25,000 bond issue for paving and grading streets. A. R. Boudinot, city engr.

Ia., Iowa City—Johnson Co. plans paving roads between Iowa City and Coralville, brick, with Federal aid.

Kan., Great Bend—City plans to pave Williams Ave., asphalt concrete. S. A. Newcombe, city engr.

Kan., Wichita—City plans to pave portions 12th, 10th and Green Sts., also Bort, Woodrow Central and Chautauqua Aves. H. D. Lester, clk.

Neb., Columbus—City sold $30,000 bonds to pave streets.

Neb., Lincoln—Lancaster Co. Comrs. plan paving Lincoln-Omaha Rd. from Lincoln to Waverly.

N. D., Hillsboro—Traill Co. soon receives bids building 7-mi. roads with state aid G. D. Olson, co. aud.

Mont., Butte—City Council plans repaving portion Main and Wyoming Sts. and several streets in down-town districts. J. J. Armstrong, city engr.

Mont., Great Falls—City plans to pave and build sidewalks and curbs on 1st Ave. 6th and 7th Sts. L. B. Evenson, city engr.

Mo., Liberty—Clay Co. voted $12,500 bond issue to complete driveway on Siloam Springs Pagoda and construct bridge. Address Co. Comrs.

Mo., Springfield — Greene Co. election Sept. 12 to vote on $10,000 bond issue to improve roads in Galloway Special Rd. Dist. L. Luster, atty. Noted Aug. 30.

Ark., Ashdown—Little River Co. plans 11-mi. sand-clay road in to Walnut Bayou. About $26,000.

Ark., Ft. Smith—City soon lets contract repaving portions North 2nd St. M. H. Reed, city engr.

Ark., Little Rock—Prairie Co. Comrs. rejected bids to construct 8-mi. concrete and 14-mi. gravel road. New bids. About $235,000. Noted July 19.

Tex., Boston—Bowle Co. Comrs. appropriated $15,000 to build 10-mi. highway from Texarkana to Red River.

Tex., Corsicana—Comrs. Court of Navarro Co. plans election, Sept. 20, to vote on $80,000 bond issue for good roads in Rice Precinct.

Tex., Wolfe City—Hunt Co., Rd. Dist. No 2, voted $100,000 bonds to build roads Noted July 26.

Okla., Atoka—See "Bridges."

Okla., Tulsa—Tulsa Co. plans $100,000 bond issue to build and improve roads. L. Cline, co. clk.

Colo., Denver—Boulder and Adams Co Comrs. plan paving 5-mi. of Federal Blvd. north of city limits. About $40,000.

Colo., Sterling—Comrs. Logan Co. plan to build 25 mi. road extending from Peetz to state line on north. Address W. E. Henning, Peetz.

New Mexico—State Highway Comn., Santa Fe, soon receives bids to build Gallup-Farmington, Alamogordo-Newman, Hondo-Meseafero and Amarillo-Roswell Rds.

N. M., Albuquerque—Bernalillo Co. plans to build La Tijera Rd. with Federal and State aid. About $24,000.

N. M., Las Vegas—City plans paving portion 6th St., and installing storm sewerage system. T. H. Benjamin, city clk.

Idaho, Lewiston—City Council rejected bids grading, curbing and sidewalks in Dist. No. 11. New bids. Noted Aug. 30.

Idaho, Nez Perce—City Council created Improv. Dists. Nos. 4, 5 and 6 and plans to build concrete sidewalks within city limits. About $15,000.

Idaho, Twin Falls—Twin Falls Co. plans election in Buhl Highway Dist. soon to vote on $250,000 bond issue to build roads.

Utah—State Highway Dept., Ogden, soon lets contract building 45-mi. highway from Castlegate to Duchesne and 9.6-mi. from Ogden to Hooper, with State and Federal aid. About $77,400 and $31,300 respectively.

Utah, Salt Lake City—City Council plans paving and improving portions Plum St. S. Q. Cannon, city engr.

Washington — State Highway Comn., Olympia rejected bids clearing, grading, draining and surfacing section No. 21 State Rd. New bids. Noted Aug. 2.

Wash., Seattle—Bd. Pub. Wks. had plans prepared grading 13th Ave. About $17,784. A. H. Dimock, city engr.

Oregon—State Bd. Control, Salem, sold $400,000 bonds for highway work. Noted July 26.

Ore., Astoria—Council passed ordinance paving and redecking portions Franklin, 26th, 32nd and 23rd Sts. J. McLear, city engr.

Ore., Coquille—(Official)—Coos Co. Court rejected only bid for macadamizing road between Empire and South Inlet bridge New bids. L. W. Oddy, co. clk. Noted Aug 16.

Ore., Enterprise—City Council plans paving streets in business district. About $15,000.

Ore., Eugene—Lane Co. will build North Fork Highway between here and Florence. H. W. Libby, co. engr.

Cal., Fresno—City to sell $10,000 bonds Sept. 17 to improve Inyo St. B. E. Kronkite, city engr.

Cal., Glendale—City plans to improve portions Bway., macadam and asphalt. About $80,000.

Streets and Roads (Continued)

BIDS DESIRED

Mass., Quincy—Until Sept. 10, by Bd. Pub. Wks., paving Smith St., granite block on concrete base. P. F. O'Brien, city engr.

Rhode Island—(Official)—Until Sept. 12, by State Bd. Pub. Rds., Providence, rebuilding section East Main Rd., Portsmouth Twp.; advertised in this issue.

N. Y., Albany—(Official)—Until Sept. 20, by E. Duffey, state highway comr., 55 Lancaster St., building and improving highways in various counties; advertised in this issue.

N. J., Cape May Court House—Until Oct. 16, by Cape May Co. Bd. Freeholders, for building gravel road in Lower Twp., involving 59,000 sq.yd. surfacing and 180,000 cu. yd. embankment. F. W. Fowkes, Sea Isle City, clk. L. M. Rice, Wildwood, co. engr.

N. J., Trenton—Until Sept. 10, by Mercer Co. Twp. Comn., improving Hopewell-Woodsville Rd. D. M. Voorhee, clk.

Pa., Pittsburgh—(Official)—Until Sept. 14, by Allegheny Co. Comrs. grading and paving Round Hill Rd., Forward Twp., 12,500 ft. and Scotia Howard Rd., Jefferson Twp., 9250 ft. J. P. Moore, controller.

W. Va., Charleston — (Official) — Until Sept. 21, by P. T. Board, city mgr., paving and curbing streets and alleys involving 17,000 ft. curb and gutter, and 27,000 sq.yd. paving. M. J. McChesney, city engr. Noted Aug. 16.

W. Va., Parkersburg — (Official) — Until Sept. 14, by City, paving, steel grading and curbing portions Ann, Charles, George, Spring 29th and 22nd Sts., sand gravel, 3-in. concrete base. Depot St., concrete. About $46,000. W. M. Hall, city engr. Noted Aug. 30.

Ala., Carrolton—Until Sept. 25, by Pickens Co., grading and paving 50 mi. road, sand, clay, gravel, pipe and bridges. G. E. Hauser, 1st Natl. Bank Bldg., Columbus, Miss., engr.

Ala., Eutaw—Until Sept. 24, by Greene Co. Comrs., grading and building road from here to Five Points. About $25,000.

Ala., Livingston—Until Sept. 24, by Sumter Co. Comrs., grading and draining 4.7-mi. state trunk road No. 7 between Livingston and Gainesville.

Ky., Louisa—Until Sept. 10, by M. A. Hay, clk. Lawrence Co., improving intercounty road from here to Sandy Hook, including 13,122-cu.yd. excava., 264-ft. 12-24-in. pipe, 4324-lb. reinforcing steel.

O., Springfield—Until Sept. 12, by City improving and paving portions Mulberry, Western Grand, Kenton, Mountain, Stanton and Southern Sts. M. J. Bahin, city engr.

Ind., Indianapolis—Until Sept. 12, by Bd. Pub. Wks., paving and grading Julian Ave., wooden blocks, asphalt, bituminous concrete or brick on 6-in. gravel concrete base. B. J. T. Jeup, city engr.

Ind., Indianapolis—(Official)—Until Sept. 17, by Bd. Pub. Wks., grading and paving portions California, Washington and Court Sts., wood block, asphalt, bituminous concrete or brick laid on 6-in. foundation, 24 ft. wide. J. A. Rink, pres.

Ill., Morrison—(Official)—Until Sept. 18, by V. N. Taggett, supt. highways, Whiteside Co., 16,046 sq.yd. gravel or gravel and macadam roadway in Albany. Noted Aug. 23.

Ia., Cherokee—Until Sept. 10, by Cherokee Co. surfacing and graveling 5½-mi. Marcus-Southern Rd. W. O. Dailey, co. aud.

Minn., Mankato — (Official) — Until Sept. 10, by N. Moe, engr., Blue Earth Co., gravelling Mapleton Rd., 4½ mi.

Neb., Lincoln—Until Oct. 1, by Lancaster Co., paving 5.6-mi. concrete, brick or asphalt road in Dist. No. 19. About $150,000. A. E. Sutherland, clk.

Mo., Kansas City—(Official)—Until Sept. 12, by Bd. Park Comrs. paving portions Paseo Rd. T. C. Harrington, secy.

Idaho, Pocatello—Until Sept. 16, by A. R. Dawson, city clk., resurfacing pavements, L.I.D. No. 22, 5400 yd. J. H. Giles, city engr.

Cal., Santa Ana—Until Sept. 18, by Orange Co. Bd. Supervs., grading 1900 lin.ft. and excavating 4600 cu.yd. on Brea-Olinda Rd. Noted July 19.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts—(Official)—State Highway Comn., Boston, let contract building Egremont West Boylston Rd. to R. H. Newell Co., Uxbridge, $44,817. Noted Aug. 2.

★Mass., Boston—City let contract paving Dorchester Ave., granite block, to B. E. Grant, 27 School St., $27,835. Noted Aug. 30.

★Mass., Boston—City let contract paving portion Commonwealth Ave., 3-in. sheet asphalt, including building bridge, to M. A. Sullivan, 35 Melville Ave., Dorchester, $119,975. Noted Aug. 2.

Connecticut—C. J. Bennett, state highway comr., Hartford, received low bids following road improvements: Hamden and Cheshire Twps., Hamden-Cheshire Rd., 28,906 ft. concrete, Sperry Eng. Co., 82 Church St., New Haven, $127,529; L. Suzio Constr. Co., State and Brooke Sts., Meriden, $130,168; L. C. Fay Constr. Co., 281 Main St., Springfield, Mass., $151,277; Stratford Twp., 7300 lin.ft. Hassam or rein.-conc., Barnum Ave., Connecticut Hassam Paving Co., 902 Chapel St., New Haven, $40,602; Waterford Twp., 3500 lin.ft. grading, Niantic Rd., F. Arrigoni & Bro., 605 Main St., Middletown, $9383, L. C. Fay Constr. Co., 281 Main St., Springfield, Mass., $10,732. Noted Aug. 16.

★Conn., New Haven—City let contract paving Wallace St. to Franklin Constr. Co., 52 Vanderbilt Ave., New York City, $17,000; Crown, Gearge and Oak Sts., to Union Paving Co., Schenectady, N. Y., $20,734.

N. Y., New York—M. M. Marks, boro. pres., received low bids, (a) regulating and repaving portions 31st St., (b) portions East 79th St., sheet asphalt on concrete foundation, from Cleveland Trinidad Paving Co., Flushing, L. I., (a) $20,255, (b) $11,582, Sicilian Asphalt Paving Co., 41 Park Row, (a) $20,336, (b) $11,725, Asphalt Constr. Co., 2197 Madison Ave., (a) $20,342, (b) $11,051.

★N. Y., Niagara Falls—City let contract repaving Chilton Ave., asphaltic concrete, to McKinney-McGuire Constr. Co., Gluck Bldg., $11,615.

★N. Y., Syracuse—City let contract surfacing portions West Gennessee St., to Warner-Quinlan Co., 224 Union Bldg., $14,752, portions South West St., vitr. block, to F. J. Baker, 319 University Blk., $28,169.

★N. Y., Yonkers—City let contract grading and regulating portion Hart Ave. to J. J. Cotalis, 811 Clover St., $19,500.

★N. J., Elizabeth—(Official)—Bd. Freeholders, Union Co., let contract paving various streets and avenues to Wolden Contr. Co., Keeling, $28,191. Noted Aug. 16.

★N. J., Newark—(Official)—Bd. Freeholders Essex Co. let contract improving Little Falls Rd. to Francisco Bros, Ridge Rd., Little Falls, $38,614. Noted Aug. 2.

N. J., New Brunswick—Middlesex Co. Bd. Freeholders received low bids reconstructing Rahway Ave. Roosevelt, from Meagher & Smith, 102 Church St., $74,964, Utility Constr. Co., 46 Paterson St., $80,080; T. H. Riddle, $76,855. Noted Aug. 16.

★Pennsylvania — State Highway Dept., Harrisburg, let contract paving State Rd. No. 583, Shickshinny, to O'Brien Bros., Avoca, $51,179.

★Pa., Chester—City let contract paving 12,620 sq.yd. to Union Paving Co., 30th and Locust Sts., Phila., and 3420 sq.yd. Belgian block alley paving to E. H. Oliver, 603 East 9th St.

★Pa., Erie—City let contract paving Hess Ave., asphalt, to J. J. Doyle, 457 West 3rd St., $11,858.

★Del., Wilmington—New Castle Co. Levy Court let contract Sect. 6 of Lincoln Highway from Newark to Maryland state line and section from Wilmington to Marshallton to Standard Bitulithic Co., 50 Church St., New York City, $91,000 and $137,000 respectively. Noted Aug. 2.

★Md., Baltimore—State Highway Dept. let contract building Telegraph Rd., Elkton, to F. C. Gorss, Equitable Bldg. Noted July 12.

★Va., Chatham—Pittsylvania Co. Supervs. let contract building 1.8-mi. highway from Danville to Henry Co. line to J. J. Bottershill, Virginia. About $14,370.

★Va., Newport News—City let contract paving 3-mi. streets to Atlantic Bithulithic Co., Virginia Ry. & Power Bldg., Richmond. About $85,000.

★W. Va., Ceredo—City let contract street paving to Hunt & Forbes, Ashland, about $33,000.

★Ga., Montezuma—City let contract paving 12,000 sq.yd. streets, vitr. brick, to Alabama Paving Co., Amer. Trust Bldg. About $25,000. Noted Aug. 9.

★Fla., West Palm Beach—Palm Beach Co. Comrs. let contract building 1-section Okeechobee River Rd. to F. A. McKenzie; 2-section to B. Johnson.

•Ala., Anniston—Calhoun Co. Comrs. let contract widening highway from Anniston to Camp McClellan, 6-mi., to Gilbert Bros., Gadsden

★Ala., Headland—Comrs. Henry Co., Abbeville, let contract 6 mi. road between here and Browns Cross Rds. to Crawley Bros., Headland.

★Ky., Cadiz—Trigg Co. let contract 5.3 mi. macadam road to C. McQuary, Hopkinsville, $20,000. Noted Aug. 9.

★O., Ashland—City let contract paving, grading, curbing and building sewers Virginia Ave. to D. Phillips, Ashland, $18,946. Noted Aug. 23.

★O., Cincinnati—(Official)—Hamilton Co. Comrs let contract improving Plainsville Rd. to R. E. Cash, 4234 Greenlee Ave., St. Bernard, $13,429; portion Livingston Rd. to O. E. Robinson, 4649 Hamilton Ave., $2012. Noted Aug. 2.

★O., Cleveland—City let contract resurfacing and improving 2 sections Clifton Rd. to Cleveland Trinidad Paving Co., 3409 Trumball St. About $55,325.

★O., Columbus—City let contract paving portions Orchard Lane to E. D. Sullivan & Son, Interurban Terminal Bldg. About $27,419.

★O., Dayton—City let contract paving Leo St. to Finke Engr. Co., Dayton, $2.70 per sq.yd. Noted Aug. 2.

★Ind., Indianapolis—Pub. Wks. Dept. let contract building and paving, asphalt, 4 units of highway to Ft. Benjamin Harrison to Union Asphalt Constr. Co., 308 Amer. Central Life Bldg.; Indiana Asphalt Paving Co., 25th St. and Lake Erie & Western Ry. tracks; Amer. Constr. Co., 108 North Delaware St.; Columbia Constr. Co., Indianapolis. Noted July 5.

★Mich., Escanaba—Town let contract paving portions Stephenson Ave., $15,970 sq.yd. bitulithic, to General Contr. Co., 1254 Plymouth Bldg., Minneapolis, $1.69 per sq.yd. Noted Aug. 30.

★Ill., Danville—Highway Comn. Carroll Twp. let contract paving road in Indianola, concrete and gravel, to C. E. Taggert, Martinsville. About $26,044. Noted Aug. 16.

★Ill., Joliet—Will Co. Comrs. let contract building hard surface road in Peotone Twp. to J. C. Poll Constr. Co., Danville, $18,000.

★Ill., Rock Island—City let contract paving 6th Ave. to McCarthy Improv. Co., 2nd and Percy St., $21,623. Noted Aug. 23.

Wis., Beloit—City received low bids paving White and Henry Aves. from Geo. Welch, Beloit; White Constr. Co., 1600 Ry. Ex. Bldg., Milwaukee; Williston Constr. Co., 343 South Dearborn St., Chicago. Noted July 5.

Wis., Sheboygan—City received low bid paving streets as follows: No. 289, J. Braun Constr. Co., Sheboygan, $21,084; No. 290, Pestien & Naumann, 821 Penn Ave., $23,922.

★Wis., Washburn—City let contract paving West Bayfield St., asphaltic concrete, to C. T. Welsh Co., 2628 Hamboldt Ave., South Minneapolis, $2.15 per sq.yd.

★Ia., Des Moines—Des Moines Co. Comrs. let contract 16-mi. roads, gravel surface, 10-ft. wide, 4-in. thick, to C. Maddy, Des Moines, $20,000.

★Ia., Des Moines—City let contract paving Beaver Ave. to J. Horrabin Co., 2nd and New York Aves., $180,000. Noted Aug. 30.

★Minn., Bemidji—Beltrami Co. Comrs. let contract grading and paving Jefferson Highway, to Leet Bros. About $11,232.

★Kan., Holsinton—City let contract paving streets to Stamey-Mackey Constr. Co., Hutchinson, $50,000.

★Kan., Wichita—City let contract paving portions Fairmont Rd., involving 4740 cu.yd. grading, 7910 sq.yd. 2½-in. vertical fibre brick laid monolithic on 4½-in concrete base to Globe Constr. Co., 401 Winne Bldg., $1.94 per sq.yd. Noted Aug. 9.

★Wyo., Sheridan—(Official)—City let contract paving in Dist No. 7, to Warren Constr. Co., Journal Bldg., Portland, $32,598. Noted Aug. 16.

★Mo., Saxon—City let contract paving streets to R. E. Williams Co., Gibson City, Ill., $300,000.

★Ark., Augusta—Woodruff Co. Cotton Plant Road Improv. Dist. No. 1, let contract building 9-mi. asphaltic macadam highway from Cotton Plant to Prairie Co. line, involving 50,000 cu.yd. grading, 110 ft. 18-in. and 72 ft. 24-in. pipe culvert and, 334 cu.yd. conerete bridges, culverts and head walls, to R. Mobley, Argenta. About $79,250.

Streets and Roads (Continued)

★Tex., Dallas—Comrs. Court Dallas Co. let contract grading Coppel Rd. to Cullom, to Bavousett & Griffin 308 Federal Bldg., bridging road to U. S. Eng. & Constr. Co., Dallas; graveling Segeville Rd. to S. A. and A. B. Murdock, Dallas; paving Miller's Ferry Rd., concrete, to Vibrolithic Constr. Co., Terminal Bldg. Total cost, $150,000.

★Okla., Clinton—City let contract paving to Western Paving Co., 578-579 Terminal Bldg., Oklahoma. About $11,388.

★Okla., Oklahoma — South Oklahoma Townsite Co. let contract paving and curbing to Western Paving Co., 519 Terminal Bldg. About $18,000.

★Utah, Logan—City let contract paving Main St. to Olaf Nelson. About $53,000. Noted July 12.

★Utah, Salt Lake City—(Official)—City let contract paving and grading several streets to Strange-Maguire Paving Co., Utah Savings & Trust Bldg., $22,632. Noted Aug. 16.

★Wash., Seattle—Bd. Pub. Wks. let contract grading Eddy St. to Sloane Bros., Seattle, $16,707. Noted Aug. 23.

Wash., Seattle—Bd. Pub. Wks. received low bid paving Elliot Ave. from Superior Constr. Co., 1642 Lane St., $11,057.

California—State Highway Comn., Sacramento, received low bids grading and paving roads between Sacramento River and Lamoine, Shasto Co., 13.3-mi. concrete, from J. F. Fitzpatrick, Ochsner Bldg., Sacramento, $153,075, F. Roland, San Francisco, $160,145; R. Rothwell, Los Angeles, $139,695. Noted Aug. 9.

★Cal., Calistoga—City let contact paving several streets, concrete, to Cushing Constr. Co., 420 Macdonald Ave., Richmond. About $17,580.

Cal., Long Beach—Bd. Pub. Wks. received low bids 135,000 sq.ft. 4-in. concrete base and warrenite pavement in 5th St. from Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $18,465.

Cal., Los Angeles—Bd. Pub. Wks. received low bid improving Franklin Ave., involving 111,862 sq.ft. bitulithic paving, 4 storm drains, 9 rein.-con. culverts and cement curbs, from Bryant & Austin, 1656 Compton Ave. About $32,700.

★Cal., Los Angeles—City let contract improvements in Rd. Dist. No. 103, involving 6595 cu.yd. excava., 14,241 lin.ft. shaping roadbed, 3200 cu.yd. concrete pavement, 64 cu.yd. concrete culverts, and 11,420 ft. expansion joints to J. S. Miller, 1249 9th St., Santa Monica. About $16,350. Noted Aug. 30.

★Cal., Los Angeles—City let contract paving portion Sherman Dr., involving 12,041 ft. regrading, 12,041 ft. recultivating, tamping and oiling, 975 ft. cement curb, 2568 sq. ft. concrete gutter and storm drain and for rein.-conc. bridge to W. M. Ledbetter, Pacific Electric Bldg., $24,957.

★Cal., San Francisco—(Official)—City let contract paving portion Silver Ave., asphalt, 6-in. concrete foundation, 2-in. asphalt surface; also Caselli and Falcon Aves., to T. H. Hutton, Call Bldg., $10,217.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

New York—Nickel Plate Connecting R.R. Corp., recently incorporated with $50,000 capital stock, plans to build line from point near Hamburg St. to connection with South Buffalo R.R., Buffalo, about 4 mi. Address Daniel J. Kenefick, Marine Bank Bldg., Buffalo.

Florida—Tatum Bros., Miami, plan railway from Miami along Miami Canal to Lake Okeechobee to connect with either Atlantic Coast Line or Seaboard Air Line, about 80 mi.

Alabama — Birmingham Civic Assn., Birmingham, plans 20 mi. railway from Birmingham to Warrior River. T. L. Cannon, 1612 Ave. I, chn.

Kentucky—Black Mt. R.R. Co., recently incorporated with $200,000 capital stock, plans railway from Pineville to Pucketts Creek and Chunk Lick Branch, Harlan Co., 10 mi. Address M. C. Spratt, Fidelity Bldg., Buffalo.

Ohio—Canton & Ohio River Ry. of Pittsburgh recently incorporated with $10,000,000 capital stock, plans 105-mi. line from Canton, O., to Wheeling, W. Va., via Toronto, O.

Texas—Southern Pacific Ry. plans line from Beasley to Needville, via Damon, Mound, Columbia, Brazoria and Freeport, about 50 mi. W. Hood, Flood Bldg., San Francisco, ch. engr.

Oklahoma—Oklahoma, New Mexico & Pacific Ry. plans line from Ringling to Waurika, about 37 mi. J. Ringling, 221 Institute Pl., Chicago, pres.

California—Bd. Works, San Francisco, authorized laying of tracks for Municipal Ry. from Van Ness and Market Sts. to Kearny St. About $300,000. T. A. Cashin, San Francisco, supt. ry.

California—City Comn., Pasadena, created board to appraise and secure options for right-of-way for proposed municipal interurban railway from Pasadena to Los Angeles, about 12 mi. A. C. Hansen, city engr.

EXCAVATION AND DREDGING

Proposed Work

Tenn., Trenton — Drainage — Gibson and Weakley Cos. formed new district to drain land along south fork Obion River. Address Co. Clk., Trenton.

Ill., Quincy — Drainage — Fabius River D. D. had plans prepared by Perkins Eng. Co., 38 South Dearborn St., Chicago, for improving system, Adams Co. About $73,000.

Minn., Detroit—(Official)—Ditch—J. A. Narum, aud. Becker Co. received no bids building county Ditch No. 19, involving 65,138 cu.yd. excava. Noted Aug. 16.

Minn., Ivanhoe—Ditches—Lincoln Co. will sell, Sept. 10, $50,000 bonds to build Ditch No. 30 and $65,000 for Ditch No. 35. K. A. Hansen, co. aud.

Cal., Brawley—Imperial Laguna Water Co. retained C. G. Frisbie to survey route of Canal to bring water from Laguna dam, Colorado River into Imperial Valley, about 40 mi.

Cal., Newport Beach — Dredging — City plans election to vote on $50,000 bonds for dredging harbor.

Ont., Port Arthur—Dredging—Dominion Government appropriated $130,000 dredging at new Saskatchewan Co-operative and Richardson elevators.

BIDS DESIRED

N. Y., New York—Dredging—Until Sept. 12, by R. A. C. Smith, comr. piers, docks and ferries, dredging slips, foot 55th, 56th and 57th Sts.

Ind., Angola—Ditch—Until Sept. 15, by Steuben Co. Comrs. building Oliver Shaeffer et. al. ditch, Fremont and Jamestown Twps. L. E. Smith, supt.

Ill., Paxton—Ditch—Until Sept. 21, by Ford Co. to construct ditch of Sub Dist. No. 2, Union D.D. 13,625 ft. long, and 41,164 ft. wide.

Ill., Urbana—(Official)—Drainage—Until Oct. 2, by Champaign Co., dredging Spoon River D.D. R. F. Fisher, Champaign, engr.

Ia., Carrollton—Drainage—Until Sept. 10, by Greene Co. supervs., D.D. No. 121, involving 76,670 ft. tile, 240 ft. sewer pipe.

Minn., Moorhead—(Official)—Ditch—Until Sept. 18, by A. O. Houglum, aud. Clay Co., building Co. Ditch No. 41, main ditch involves 212,832 cu.yd. excava., depth 7.2 ft. Cost $49,924 with steel bridges, $41,774 with wooden bridges.

Minn., Walker—Ditch—Until Sept. 10, by Comrs. Cass Co., for Judicial Ditch No. 6 requiring 70,234 cu.yd. excava. on main ditch, 18,724 cu.yd. on laterals, culvert bridges, etc. C. D. Bacon, co. aud.

Cal., Modesto—Irrigation—Until Sept. 21, by Modesto Irrigation Dist., enlarging main canal between Indian Hill fill and flume E; also lining 3 divisions of main canal between Salter and Rariden fill. Noted June 28.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mich., Battle Creek — Dredging — A. Briggs, drain comr., let contract dredging Porter Lake drain to Minor & Russell, Coldwater.

★Ia., Des Moines—Drainage—Joint D. D. No. 1, Polk and Storey Cos., let contract system to Nels S. Helland & Sons, Huxley, $29,500. Noted Aug. 9.

★Ia., Emmetsburg—Drainage—D. D. No. 98, Palo Alto Co., let contracts system involving 315,000 cu.yd. excava. as follows: A. Eikwald, labor, $30,300; Cement Products Co., Spencer, tile, $44,748; Schultz, Bieck, Clarion, open work, $25,219. Noted Aug. 9.

★Minn., Faribault—Ditch—Rice Co. let contract Co. Ditch No. 12 to Rood Constr. Co., Grand Rapids, Wis., about $23,274. Noted Aug. 2.

★Colo., Lamar—Drainage—Wiley D., Frovers Co., let contract 9¼ mi. ope tch involving 43½ mi. 6- to 18-in. tile d to Saylor Constr. Co., Lamar. Noted A 16.

★Cal., Lasson—Irrigation—Baxter eek Irrigation Dist. let contract canal an am to Shattuck-Edinger Co., Underwood lg., San Francisco.

INDUSTRIAL WORKS

Proposed Work

N. Y., New York—C. Hensle, 387 0th Ave., having plans prepared by M & Lardsiedel, archts., 148th St. and 3rd Ave., 7-story, 30 x 200-ft. garage, Riversid Dr and 134th St. About $150,000.

N. Y., S. I., New Brighton—Tanner Cross Co., Inc., 25 Beaver St., New York City, plans 5-story, 112 x 114 ft., cereal mill and warehouse. About $125,000. A. E. Baxter Eng. Co., engrs., Elliot Bldg., Buffalo, soon receive bids.

N. J., Harrison—H. R. Worthington Co., Harrison, had plans prepared for 2 factory additions. About $200,000.

N. J., Newark — Willys-Overland Co., Newark, plans 4-story, 80 x 240 ft. rein.-con. service station, Plane and Hackett Sts. George Hooper, 35 Halsey St., archt.

Pa., Pittsburgh—Natl. Supply Co., Union Bank Bldg., having plans prepared for warehouse, Preble Ave., Adams and Delaware Sts., N. S. About $50,000.

Va., Richmond—Kingan & Co. having plans prepared for rein.-con. abattoir on Hermitage Rd. About $80,000.

Ga., Atlanta — American Agricultural Chemical Co., 625 Empire Bldg., plans 70 x 600-ft. fertilizer factory, Peatree Creek About $50,000. E. F. Daniels, genl. mgr.

Ga., Columbus—Columbus Power Co., 2nd Ave., controlled by Stone & Webster Eng. Co., 147 Milk St., Boston, plans additional unit to power plant. About $200,000. J. S. Bleecker, genl. mgr.

Ala., Mobile—Alabama Dry Docks & Shipbuilding Co. purchased tract at Royal and Canal Sts. and had plans prepared for a shipbuilding plant.

Tenn., Jackson—Illinois Central R.R. plans to improve and enlarge its yards and shops. About $180,000. Also build concrete office and storage building. About $65,000. A. S. Baldwin, Chicago, ch. engr.

Ky., Bowling Green—Persons & Scoville having plans prepared by C. Shopbell & Co., archts., 3-story, 75 x 140-ft. warehouse.

Ky., Louisville—Kentucky Pub. Elevator Co., 14th and Gallagher Sts., plans to rebuild portion of its factory recently destroyed by fire. About $75,000.

O., Akron—Sanitary Milk Co. having plans prepared by Practical Eng. Co., engrs., 535 Akron Savings and Loan Bldg., 2-story, 60 x 110-ft. milk depot. About $85,000.

O., Canton—Pennsylvania R.R. plans large new shops and roundhouse east of Canton. A. C. Shand, Broad St., Sta., Phila., ch. engr.

O., Cleveland—American Can Co., East 40th St., recently acquired site on Payne Ave., and plans to spend about $2,000,000 to build plant.

O., Cleveland—J. R. Glover, Hippodrome Bldg., having plans prepared garage and automobile storage plant, East 46th St. About $100,000.

O., Cleveland — Grable Mfg. Co., 6535 Bway., plans 66 x 104-ft. brick steel and rein.-con. factory. Christian Schwarzenberg & Gaede, archts., 1900 Euclid Ave., soon receive bids.

O., Cleveland—Natl. Mortgage Co., 603 Rockefeller Bldg., Cleveland, soon lets contract 7-story, 100 x 300-ft. rein.-con. and structural steel warehouse, Greene and Ladd Sts. About $300,000.

O., Cincinnati—See "Buildings."

O., Cincinnati—C. Schiear Motor Car Co. plans 3-story auto warehouse, 9th and Sycamore Sts. About $125,000.

O., Dayton—Citizens Motor Car Co., Cincinnati, plans 2-story, 75 x 170-ft. garage and salesroom. About $50,000 to $100,000. J. W. Tarbill, 7th and Main Sts., pres. A. Pretzinger and E. Musselman, 1126 Reibold Bldg., archts.

Indu ial Work (Continued)

O., Dayton—Cooper Medicine Co., 309 East 1st St., had plans prepared 5-story, 50 x 1 8-ft. factory. About $175,000. Prezing & Musselman, 1155 Riebold Bldg., arch

O., ast Cleveland—(Cleveland P. O.)—Clev nd Motor Plow Co., Euclid Ave. and Lomb St., Cleveland, having plans prepared for ant here. About $300,000.

O., Lakewood—Lake Erie Refining Co. had ans prepared by S. H. Weis, archt., 103 Schofield Bldg., 2-story, market house, terra cotta and granite, Clifton and West 117th Sts. About $125,000.

Ind., Hartford City—Ft. Wayne Corrugated Paper Co., Murray and Barr St., Ft. Wayne, plans 1-story power house. About $75,000. Prather Eng. Co., 662 Rockefeller Bldg., Cleveland, engrs.

Ill., Chicago—Patterson-Sargent Co., St. Clair Ave., Cleveland, plans 5-story brick warehouse and factory, 20th and Lumber Sts.

Ill., Chicago—H. Piper Co., 1619 North Wells St., soon lets contract 1-story, 43 x 105-ft. bakery. About $60,000. W. Ahlschlager, 111 West Washington St., archt.

Ill., East St. Louis—American Manufacturing Co. of Massachusetts, has purchased site and plans bagging plant here. About $500,000.

Wis., Milwaukee — Heil Co., 26th and Montana Ave., having plans prepared by Klug & Smith, engrs., Mack Blk., 1 story, 130 x 200-ft. brick and steel addition. About $100,000. J. P. Heil, yice pres. and genl. mgr.

Ia., Muscatine—Ziegle Canning & Preserving Co. plans to rebuild plant recently destroyed by fire with loss of $60,000.

Ia., Sioux City—Lessenich. Estate soon lets contract 3-story garage. About $50,000. Beuttler & Arnold, 609 Security Bldg., archts.

Ia., Waterloo—Repass Auto Co. having plans prepared by C. P. Shockley, archt., 719 Black Bldg., for rein.-con. and brick garage. About $100,000.

Ia., Waterloo—Waterloo Engine Co. plans 150 x 600-ft. foundry. About $200,000.

Minn., Hibbing—See "Miscellaneous."

Minn., Minneapolis—Marfield Grain Co., 23rd and Marshall Sts., plans to build grain elevator. About $77,000.

Minn., West Duluth—(Duluth P. O.)—Duluth Iron Wks. Co. having plans prepared by Edward & Standuhar, Glencoe Bldg., Duluth, punch shop, machine shop, blacksmith shop and office.

S. D., Sioux Falls—Sioux Falls Coffee & Spice Co., 10th St., had plans prepared 4-story, 40 x 100-ft. plant, 426 East 12th St. A. Gloege, pres.

Wyo., Caspar—Standard Oil Co. plans large addition to its refinery here.

Tex., Texarkana—Texas & Pacific Ry. plans to build brick roundhouse. About $50,000. E. F. Mitchell, Dallas, ch. engr.

Tex., Tyler—Woldat Grocery Co., Tyler, plans large peanut manufacturing plant. About $250,000.

Okla., Bartlesville — Parsons Wholesale Grocery Co. plans 2-story building. About $50,000.

Idaho, Pocatello—Idaho Portland Cement Co., recently incorporated with $2,500,000 capital, plans cement manufacturing plant, capacity 1,000 bbl. per day. W. W. McCarthy and J. T. Young, Pocatello, interested.

Wash., Seattle—The Sunset Motor Co., 12th Ave. and East Pike St., had plans prepared 4-story, 60 x 112-ft. brick and concrete garage and salesroom. About $70,000. B. Johnson, 3838 Evanston Ave., archt., soon receives bids.

Wash., Spokane — Willys-Overland Co. having plans prepared brick garage and salesroom. About $150,000. V. W. Voorhees, Inc., Eitel Bldg., Seattle, archt.

Ore., Portland—Dock Comrs. having plans prepared by J. M. Witherspoon, engr., 3650 Pine Grove St., Chicago, 1,000,000-bu. grain elevator.

Cal., Huntington Park—City Dye Wks., 30th St. and Central Ave., Los Angeles, having plans prepared 8-story, brick building, by Paul C. Pape, archt., Consolidated Realty Bldg., Los Angeles.

Cal., Los Angeles—Wholesale Terminal Co. plans 6-story, cold-storage plant, 7th and Central Sts., to be leased to Terminal Refrigerating Co.

Cal., Los Angeles—Wilson & Co., 1000 Lynn St., plans 4-story, rein.-con. cooling plant. About $54,000.

Ont., Toronto—Canadian Genl. Electric Co., 212 King St., W., plans new warehouse. About $100,000.

Ont., Toronto—Thor Iron Wks., Bathhurst St., having plans prepared for rein.-con. and brick factory. About $75,000.

BIDS DESIRED

N. Y., Ogdensburg—(Official) Until Sept. 12, by State Hospital Comn., Capitol, Albany, construction work for power plant, Lawrence State Hospital; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—General Electric Co., 84 State St., let contract 4-story, 80 x 34-ft. brick and rein.-con. factory, Porter Ave., N., to W. Bailey Co., 88 Broad St. About $210,000. Noted May 31.

★Mass., New Bedford—Paipont Co., Howland St., let contract building 4-story, 100 x 200 ft. warehouse to J. W. Bishop Co., 417 Butler Ex. Bldg., Providence, $350,000.

★Conn., Fairfield—Bullard Machine Tool Co., 585 Broad St., Bridgeport, let contract 5 buildings; main building, 180 x 700-ft. brick and steel, to W. R. Phillips, Newfield Bldg., Bridgeport, $1,000,000.

★Pa., New Castle—American Sheet & Tin Plate Co. let contract 2-story, 56 x 70-ft. addition to Cuthbert Bros., Bessemer Bldg., Pittsburgh, $50,000.

N. Y., New Hampton—Comr. Correction Municipal Bldg., New York City, received low bid building power house and connecting tunnels at New York City reformatory from Frymier & Hanna, 25 West 45th St., New York City, $53,968. Noted Aug. 9.

★Ill., Galesburg—McCullon Bros. let contract 4-story, 57 x 150-ft., rein.-con. candy factory to Monmouth Constr. Co., 222 Bank of Galesburg Bldg., $100,000.

★Ill., Moline—Williams & White, 3rd Ave. and 18th St., let contract forging plant to P. H. Lorenz, 7th St. and 19th Ave., $200,000.

★Que., Shawinigan Falls — Canadian Aloxite Co. let contract new factory to Church Ross & Co., 40 Hospital St., Montreal, $50,000.

BUILDINGS

Proposed Work

N. H., Nashua—High School—City soon lets contract, 3-story, 150 x 165-ft. About $200,000. G. H. Alley, 69 Concord St., chn. bldg. com. T. M. James, 185 Devonshire St., archt.

Mass., Middleton—Hospital—Essex Co. Comrs., Court House, Salem, had plans prepared by J. H. Bickford, archt., 110 State St., Boston, 5 2-story buildings.

Mass., New Bedford—Hospital—City having plans prepared by J. S. McIntyre, archt., Clifford Bldg.

Conn., New Haven—Station—New York, New Haven & Hartford R.R. plans, 4-story, 90 x 300 ft. E. Gagel, New Haven, ch. engr. Cass Gilbert, 244 Madison Ave., New York City, archt.

N. Y., Albany—Office—L. F. Pilcher, state archt., Capitol Bldg., prepared plans for addition west of Capitol.

N. Y., Binghamton—School—Bd. Educ. had plans prepared by T. I Lacey & Son, archts., 1110 Press Bldg., for addition. About $50,000. M. R. F. McCarthy.

N. Y., Kingston—Theater—S. Bernstein, and associates, 173 Pearl St., plan, 1- and 2-story. About $60,000. G. W. Botz, 61 John St., archt.

N. Y., New York — Hospital — Dept. Health, Center and Walker Sts., had plans prepared by W. A. Austin, archt., 46 West 24th St., 4-story, Schieffelin Pl., Seton Ave. and 233rd St. (Bronx Boro.) to be largest contagious hospital in world.

N. Y., Pomfret—Tuberculosis Hospital—Newton Memorial Hospital having plans prepared by J. F. Warner, archt., Granite Bldg., Buffalo, 2- and 3-story, brick and concrete. About $135,000. B. H. Philips, 804 Morgan Bldg., Buffalo, trustee.

N. J., Rahway—Temple—Craftsmans Club had plans prepared by S. Williams, archt., Woodruff Bldg., 2-story, 50 x 150-ft. About $50,000.

N. J., Red Bank—School—Bd. Educ. having plans prepared by E. A. Arend, archts., Kimmouth Bldg., Asbury Park, 2-story, 75 x 123-ft., and extension 50 x 75-ft. adjoining high school. About $100,000. R. Strong, pres.

Pa., Abington—High School—Bd. Educ. plans 3-story addition. About $50,000. L. Foster, secy. Hancock & Hokanson, Bailey Bldg., Phila., archts.

Pa., Ashley—High School—Bd. Educ. having plans prepared by A. Reilly, archt., Bennett Bldg., Wilkes-Barre, 2-story, 78 x 118-ft. About $100,000.

Pa., Bloomsburg — Bank and Office — Columbia Co. Trust Co. had plans prepared by V. T. Ritter, archt., First Natl. Bank Bldg., Huntington, W. Va., 4-story, 24 x 120-ft., brick and concrete.

Pa., Cambria—School—Immaculate Conception Church having plans prepared. About $60,000.

Pa., Johnstown—Junior High School—Bd. Educ. plans. About $300,000. C. H. Myer, secy. J. E. Adams, Lincoln Bldg., and G. Wild, 734 Main St., archts.

Pa., Johnstown—Hospital—Bd. Corporators of Lee Memorial Hospital having plans prepared by Henry M. Rogers, archt., Trust Bldg., Johnstown, 5-story, at 320 Main St.

Pa., Phila.—Club House and Auditorium—Phila. Musical Assn. plans, 3-story, 60 x 132 ft. About $100,000. A. Hirschburg, 259 North 6th St., pres. F. E. Hahn and Max Hirschberg, 1112 Chestnut St., archts.

Pa., Phila.—Bank—Olney Bank, 5th St. and Tabor Rd., plans 1-story. About $50,000. T. Tansey, pres.

Pa., Phila.—Hotel—Bonwit Teller Co. plans improving. About $400,000. S. Rosenbaum, 13th and Chestnut Sts., mgr. LeRoy Rothschild, Juniper and Filbert Sts., archts.

Pa., Phila.—House of Correction—City soon lets contract(2- and 3-story. About $89,000. C. Oelschlager, 1613 Walnut St., archt.

Pa., Phila.—Hospital—Babies Hospital plans. About $50,000. C. A. Fife, 2038 Chestnut St., pres. Duhring, Okie & Zeigler, 1220 Chestnut St., archts.

Pa., Pittsburgh—Y. M. C. A. plans new building, 7th Ave. and Bigelow Blvd. About $1,000,000. R. W. Harbison, pres.

Del., Laurel—High School—Bd. Educ. plans, 2-story. About $55,000. W. E. Hance, 204 West 24th St., Wilmington, archt.

Md., Baltimore—School—Bd. Educ. plans school, principals residence and gymnasium. About $50,000. F. Cookman Leach, archt., 323 North Charles St., soon receives bids.

Va., Norfolk—Office and Loft—Tazwell St. Realty Co., Tazwell St., had plans prepared by R. E. Mitchell, archt., Greenwood Bldg., 6-story, 130 x 144-ft. concrete. About $300,000.

W. Va., Huntington—Bank—Union Savings Bank & Trust Co. having plans prepared by Bankers' Eng. Co., archts., 11 East 19th St., New York City, 10-story, rein.-con. About $250,000.

Fla., Tallahassee—Dormitory and Educational—Florida State College for Women having plans prepared. About $90,000.

Ala., Birmingham — Seminary — Louli Compton Seminary secured site at Edgewood and plans new building to be known as Birmingham Seminary. About $50,000.

La., Thibodaux—Hotel—Lafourche Hotel Co., recently organized, plans. About $60,000. N. T. Bourg, pres.

Tenn., Jackson—Office—See "Industrial Works."

Ky., Frankfort—Hotel—Capitol Hotel Co. had plans prepared, 4-story. About $75,000. C. C. and E. A. Weber, Citizens Bank Bldg., Cincinnati, archts.

O., Cincinnati — Commercial — Leyman Brick Co., 630 Walnut St., had plans prepared by G. W. Drach, archt., Union Trust Bldg., 10-story commercial building and service station, 7th and St. Clair Sts. About $200,000.

O., Cincinnati—Exchange—Cincinnati & Suburban Telephone Co. will issue $1,716,650 additional stock. Part of proceeds will be used for new buildings.

O., Cincinnati—Freight Terminal—Baltimore & Ohio R.R. plans huge freight terminal here. H. Lane, Baltimore, ch. engr.

O., Cleveland—Church—St. Elizabeths Hungarian Congregation soon lets contract, 1-story, 50 x 100 ft. About $120,000. Julius Szepessy, 9016 Buckeye Rd., pastor. E. Ulrich, 1900 Euclid Ave., archt.

O., Cleveland Heights—(Warrensville P. O.)—Home—Montefiore Home for Aged and Infirm Israelits, had plans prepared, 2- or 3-story. About $75,000. C. R. Greco, 729 Guardian Bldg., Cleveland, archt.

Buildings (Continued)

O., Dayton—Bank—Gem City Building & Loan Assn., having plans prepared by Schenk & Williams, archts., 591 Arcade Bldg., 1-story, 38 x 60-ft. About $100,000. O. L. Bard, 8 North Main St., mgr.

O., Lakewood—Store—J. H. Greenberg, 1291 East Blvd., secured site and plans, 4-story concrete, on Detroit St. About $50,000.

O., Rawson—Grade and High School—Bd. Educ. soon lets contract. About $60,000. McLaughlin & Hulsken, Savings Bldg., Lima, archts.

Ind., Ft. Wayne—Bank and Office—Citizens Trust Co., Berry and Clinton Sts., plans to remodel, 4-story. C. R. Weatherhogg, Hamilton Natl. Bank Bldg., archt.

Ind., Indianapolis—Hotel—Lincoln Hotel Co. having plans prepared by A. E. Metzger and Rubush & Hunter, archts., Amer. Central Life Bldg.

Ind., Lafayette—Hospital—Home Hospital Assn. had plans prepared by Schmidt, Garden & Martin, archts., 104 South Michigan Ave., Chicago, 4-story. About $90,000.

Mich., Detroit—High School—Bd. Educ. had plans prepared by Malcomson & Higginbotham, archts., 404 Moffat Bldg., for Cass Technical High School, 1, 2 and 3 units. About $125,000. C. Gadd, secy.

Mich., Detroit—Jail—Wayne Co. had plans prepared by Smith, Hinchman & Grylls, archts., 710 Washington Arcade, on Baubien St. between McComb and Clinton Sts. About, $1,500,000.

Ill., Chicago—Church and Chapel—Grace Episcopal Congregation, 2001 Prairie Ave., soon lets contract rebuilding. About $200,000. B. G. Goodhue, 2 West 47th St., New York City, archt.

Ill., Chicago — Church — St. Hyacinths Congregation plans, 1-story, 130 x 210 ft. About $200,000. Rev. John Zdechlik, 3636 Wolfram St., pastor. Worthmann & Steinbach, archts., 155 North Clark St., will soon receive bids.

Ill., Chicago — Hotel — Kercher Hotel & Dodge Co. receives bids about Oct. 1, 12-story, 80 x 171-ft. About $1,150,000. W. Ahlschlager, 1740-44 Conway Bldg., archt.

Ill., Chicago—Theater, Office and Store—Jones, Linck & Schaefer, 112 South State St., had plans prepared by C. W. & G. L. Rapp, archts., 69 Washington St., brick and steel, 47th and Marshfield Sts. About $250,000.

Ill., Riverside—School—F. I. Bennett, comr. pub. wks., Chicago, soon lets contract dining hall, 3 dormitories, etc. C. W. Kallal, City Hall, archt.

Ill., Rockford—Hotel—Nelson Hotel Co. having plans prepared by Miller, Fullenwider & Dowling, archts., 6 North Michigan Ave., Chicago, 5-story, 56 x 150-ft. addition. About $300,000. J. A. Oberg, Main and Chestnut Sts., mgr.

Wis., Kenosha—Store and Office—V. C. Wolff having plans prepared by R. A. Messmer & Bro., archts., Pabst Theater Bldg., Milwaukee, 4-story, 80 x 100-ft. About $100,000.

Wis., Park Falls — City Hall — Council having plans prepared by A. Messmer & Bro., archts., Pabst Theater Bldg., Milwaukee. About $60,000.

Wis., Sagole — (Kaukaunna P. O.) — Church—Freedom Congregation plans, 2-story, 72 x 147 ft. About $80,000. F. Peters, pastor. Foeller & Schober, 123 North Washington St., Green Bay, archts.

Wis., Wauwatosa — Children's Cottage Muirdale Tuberculosis Hospital soon lets contract, 2-story, 50 x 200-ft. About $60,000. D. H. Davies, Administration Bldg., secy. R. A. Messmer & Bro., Majestic Bldg., Milwaukee, archts.

Wis., Wauwatosa — Psychopathic — Milwaukee Co. soon lets contract 2 buildings. About $85,000. R. A. Messmer & Bro., Majestic Bldg., Milwaukee, archts.

Ia., Des Moines—Church—Grace Methodist Congregation having plans prepared, 3-story, 114 x 146 ft. About $125,000. E. E. Higley, pastor. N. T. Vorse, S. & L. Bldg., archt.

Ia., Dubuque—Hotel and Store—Larimier House Hotel Co., 1552 Locust St., having plans prepared by L. Stevens & Co., archts., 910 South Michigan Ave., Chicago, 8-story, 60 x 146-ft., Julian Ave. and Bluff St. About $210,000. D. H. McCarthy, mgr.

Ia., Spencer—School—Bd. Educ. plans rebuilding 2-story, recently destroyed by fire. About $70,000. F. A. Cook, secy. J. D. Chubb, 109 North Dearborn St., Chicago, archt.

Minn., Minneapolis—Bible School, Auditorium, Store and Office—North Western Missionary and Training School having plans prepared by Burner & Macomber, archts., 945 McKnight Bldg., 12-story, 132 x 250-ft. About $1,000,000.

Minn., Minneapolis—Hotel and Arcade—McMichael Investment Co. plans, 12-story, 50 x 150 ft. About $200,000. H. E. Williams, 600 Wilmac Bldg., pres.

Minn., Minneapolis—School—Bd. Educ. plans, 2-story. About $65,000. R. V. L. Haxby, Court House, archt.

Minn., Lakefield—High School—Bd. Educ., Ind. School Dist. No. 3 plans, 2-story, 120 x 120 ft. About $75,000. K. T. Snyder, 1103 Plymouth Bldg., Minneapolis, archt.

Minn., St. Cloud—Hotel and Store—Riverview Hotel Co. had plans prepared by A. J. Mille, archt., 714 Plymouth Bldg., Minneapolis, 4-story. W. A. Bach, pres.

Minn., St. Paul—Store and Office—Cushing & Driscoll, 291 Endicott Bldg., had plans prepared by R. T. Newberry, archt., 108 South Lasalle St., Chicago, brick, 6th and Peter Sts., about $1,000,000.

Minn., Virginia—High and Manual Training School—Bd. Educ. plans to build. About $375,000. C. E. Nystrom, archt., Seelwood Bldg., soon receives bids.

Kan., Garden City,—High School—Bd. Educ. plans, 3-story, 58 x 110-ft., brick. About $50,000. E. J. Dumond, clk. W. E. Hulse & Co., 1st Natl. Bank Bldg., Hutchinson, archts.

Kan., Topeka — Home — Knights and Ladies of Security plan to build. About $50,000.

Kan., Topeka — Hotel — North American Hotel Co., Omaha, Neb., plans 10-story, 9th St. and Kansas Ave. About $500,000.

Neb., Omaha—Hotel and Office—Home Builders, Brandies Theater Bldg., plans, 7-story, 110 x 120 ft., 18th and Dodge Sts. About $300,000. J. T. Allen, 224 Brandies Theater Bldg., archt.

S. D., Eden—Church—Roman Congregation plans, 1- and 2-story, 50 x 140 ft. and 32 x 34 ft., church and parish house. About $60,000. Anton Dohman, 1st Natl. Bank Bldg., archt.

Wyo., Casper—Lodge—B. P. O. E. plans. About $150,000.

Mont., Great Falls—School—Bd. Educ. plans, 2-story, 60 x 140 ft. About $165,000. Bird & Van Toylingen, archts.

Mo., St. Joseph—Maternity Hospital — City having plans prepared by Trunk & Gordon, archts., Donnell Court Bldg., on 15th and Edmond Sts. About $70,000.

Ark., Little Rock—Office—U. S. Auto Co., 20th and Main Sts., had plans prepared. 123 x 150-ft. About $100,000. M. S. McCord, mgr.

Tex., Bryan—School—City School Bd. plans election to vote $100,000 bond issue for school.

Okla., Miami—Hospital—Baptist Hospital—Baptist Hospital Assn. plans. About $70,000. Address F. M. McConnell, supt. of Missions, Oklahoma City.

Colo., Canon City—Church—First Presbyterian Congregation plans. About $50,000. J. W. Domdley, pastor.

Utah, Beaver—Schools—Beaver Co. election soon to vote on $125,000 bond issue to build schools. Ashworth & Nelson, Provo City, archts., preparing plans.

Cal., Azusa—School—City had plans prepared by Allison & Allison, archts., Merchants Natl. Bank Bldg., Los Angeles. About $50,000.

Cal., Oakland—Exchange—Pacific States Telephone & Telegraph Co. plans, 6-story, Class "A" building.

Cal., Oakland—Hospital—Alameda Co. voted $100,000 bonds to build hospital.

Cal., San Francisco—Hotel—Ramona Hotel, Ellis St., having plans prepared by Smith & Stewart, archts., Monadnock Bldg., 3-story, rein.-con. addition. About $50,000.

Cal., San Francisco — Hotel — Stewart Hotel Co. having plans prepared for addition, by Cunningham & Politeo, archts., 1st Natl. Bank Bldg. About $150,000.

Cal., San Francisco—Office—White Investment Co., Newhall Bldg., plans, brick and concrete, Battery near California St. About $80,000.

Cal., San Francisco — Theater — Max Blumenfeld plans, 100 x 101 ft., rein.-con., Kearnby St. and Bway., to seat 2000 people. Weeks & Day, Mutual Savings Bank Bldg., archts.

Que., Quebec—School—Bd. Educ. c/o G. E. Tanguay, archt., 20 D'Aiguillon St., soon lets contract, brick and stone. About $136,000.

BIDS DESIRED

Pa., Chester—High School—Until Sept. 21, by Bd. Educ., Hoskins Bldg., 5th and Welch Sts., 5-story, 115 x 240-ft. About $400,000. C. S. Adams, 1509 Arch St., archt. Noted Aug. 2.

Pa., Uniontown—Until Sept. 4, by Y. M. C. A., 4-story, 76 x 90 ft. H. W. Altman, 1st Natl. Bank Bldg., archt. Noted May 10.

O., Cleveland—Hotel—Until Oct. 1, by Estates Improv. Co., c/o G. T. Tenslush, Union Bldg., 12-story, 65 x 150-ft., Euclid Ave. and East 59th St. About $450,000. H. T. Jeffrey, 1836 Euclid Ave., archt. Noted Aug. 23.

O., Cleveland Heights—(Warrensville P. O.)—School—Until Sept. 15, by F. Warner archt., 718 Hippodrome Bldg., Cleveland. About $180,000. L. K. Bryan, 3867 Parkdale Ave., secy. bd. educ.

Ind., Crawfordsville—High School—Until Sept. 10, by Bd. Educ., 12-room addition. L. N. Hines, supt. R. F. Daggert, 926 Lemke Annex, Indianapolis, archt. Noted May 31.

Ind., Indianapolis—Until Sept. 30, by Antioch Baptist Congregation. N. E. Joseph, 136 South Catherwood St., pastor. W. O. Marck, Lombard Bldg., archt.

Ia., Letts—School—Until Sept. 13, by Ecklan Fugard & Knapp, archts., McKinnie Bldg., Moline, Ill., 2-story, 70 x 120-ft. About $50,000. Noted July 26.

Minn., Virginia — High School — Until Sept. 12, by Bd. Educ. About $400,000. C. E. Nystrom, Sellworth Bldg., Duluth, archt.

Kan., Concordia—High and Grade Schools —Until Sept. 11 (change of date), by Bd. Educ., brick; about $55,000. W. E. Hulse & Co., 1st Natl. Bank Bldg., Hutchinson, archts. Noted June 28.

Tex., El Paso—Cathedral—Until Sept. 10, by El Paso Consistory, Scottish Rite Masons. About $200,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—Hospital—City received low bid ward building from Crowley & Hickey, 1140 Columbus Ave., Roxbury, $80,444. Noted Aug. 16.

★Mass., Cambridge—Store and Office—Olympia Theatre Co., 3 Tremont Row, Boston, let contract, to J. M. & C. J. Buckley Co., 164 Federal St., Boston. About $400,000. Noted May 17.

★Pa., Phila.—Freight House—Phila. & Reading R.R. let contract 1-story, brick and steel addition to freight house No. 4, Noble St., to A. L. Carhart, Hale Bldg., $50,000.

★Del., Newark—Women's Dormitory—Delaware College let contract, 4-story, 30 x 48-ft. to J. H. Wells, 112 South 16th St., Phila., $75,000. Noted Aug. 23.

★Wash., D. C. — (Official) — Parochial School—Holy Trinity Congregation let contract, 2-story, concrete and brick, to Boyle-Robertson Co., 2602 Wisconsin Ave., $140,000. Noted July 19.

★La., New Orleans—Hotel—H. C. Buckley let contract, brick, West End Rd., to J. E. Petty, Godchaux Bldg., $200,000.

★O., East Cleveland—(Cleveland P. O.)—School—Bd. Educ. let contract addition to Chambers School to Minnick-Gibbons Constr. Co., 5309 Prospect Ave., Cleveland. About $50,000.

★Wis., Madison—Y. M. C. A. let contract 5-story building West Washington and South Fairchild Sts., to J. Findorff, Madison, $210,000.

★Minn., Fairmont—(Official)—School—Bd. Educ., East Chain Twp., let contract, to Pick & Lehman, 710 Cherokee Ave., St. Paul, $22,357. Noted Aug. 16.

★Minn., St. Paul—Hotel—C. J. Minor, Dayton and Virginia Aves., let contract, 11-story, brick, terra cotta and granite, to G. J. Grant Co., 902 N. Y. Life Bldg., $1,000,000.

Buildings (Continued)

★**S. D., Spearfish** — Gymnasium — State Normal School let contract, 2-story, 100 x 100-ft., to Anderson-Taylor Constr. Co., 533 Lumber Exchange, $65,000. Noted July 5.

★**Wash., Seattle**—School—Bd. Educ. let contract Whitworth School to Scherer & Carlson, University Campus. About $75,000.

★**Cal., Oxnard Bank**—First Natl. Bank let contract, 65 x 100-ft., to Los Angeles Planing Mill Co., 1812 Industrial St., Los Angeles, $55,000.

FEDERAL GOVERNMENT WORK

Proposed Work

Kan., Ft. Riley — Bridge — Constructing Quartermaster rejected bids opened Mar. 27 for replacing bridge over Republican River; same were in excess of appropriation.

BIDS DESIRED

Pa., Phila. — Dredging — Until Sept. 10, by Bureau of Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., dredging at Navy Yard.

Del., Wilmington — Jetty Work — Until Sept. 22, by U. S. Engr. Office, Old Federal Bldg., repairs to jetties at mouth Mantua Creek, N. J.

Va., Norfolk—Tank and Tower—Until Sept. 10 (change of date), by Bureau of Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., furnishing and installing 150,000 gal. elevated steel tank and tower. Noted Aug. 23.

Fla., Key West—Metal Work, etc.—Until Oct. 30, by Lighthouse Inspector; advertised in this issue.

Fla., Tampa—Dolphins, Etc.—Until Sept. 17, by J. A. Wetmore, superv. archt., treas. dept., Wash., for 2 additional dolphins and furnishing and installing complete 32 spring buffers at wharf of Quarantine Sta.

Miss., Vicksburg—Levee—Until Sept. 11, by Third Mississippi River Dist., Box 404, constructing about 1,000,000 cu.yd.; advertised in this issue.

Miss., Vicksburg—Levee—Until Sept. 12, by Third Mississippi River Dist., Box 404, constructing about 303,000 cu.yd.; advertised in this issue.

Tenn., Memphis—Machinery—Until Sept. 26, by Mississippi River Comn., 1st and 2nd Dists., Custom House; advertised in this issue.

Mich., Detroit—Lumber—Until Sept. 10, by Light House Inspector, P.O. Bldg., furnishing about 35,000 B. M. miscellaneous framing lumber for Sand Hills Light Sta.

Minn., St. Peter—Post Office—Until Oct. 4, by J. A. Wetmore, superv. archt., treas. dept., Wash.

N. M., Farmington—Bridge—Until Sept. 24, by Cato Sells, comr. Indian Affairs, Wash.

Cal., San Francisco—Wharf—Until Oct. 2, by J. A. Wetmore, superv. archt., treas. dept., Wash., rebuilding west wing at wharf at quarantine station, Angel Island.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Chatham**—Coastal Air Station—Bureau of Yards and Docks, Navy Dept., Wash., let contract to Coleman Bros., Chelsea, cost plus percentage.

Mass., Hingham—Magazine Storehouses—Bureau of Yards and Docks, Navy Dept., Wash., received low bids 2 magazine storehouses, (a) net price work complete, (b) net price work complete excepting columns, etc., as follows: Kennedy & Patterson Constr. Co., 7 Water St., Boston, (a) $106,200, (b) $104,200; T. H. Wiese, 1301 City Natl. Bank, Omaha, (a) $126,000; Howard Bros., 412 Dorchester Ave., Boston, (a) $128,875, (b) $124,875. Noted Aug. 16.

Conn., New London — Storehouse — Bureau of Yards and Docks, Navy Dept., Wash., received low bids (a) work complete, (b) alternate design, from P. J. Carlin Constr. Co., 1123 Bway., New York City, (a) $129,800; Industrial Eng. Co., 30 Church St., New York City, (a) $131,585, (b) $130,100. Noted Aug. 9.

N. Y., New York—Electric-Lighting System—Bureau of Yards and Docks, Navy Dept., Wash., received low bids from L. K. Comstock, 30 Church St., $10,490; T. F. Jackson, 99 John St., $12,690; Hatzel & Buehler, Inc., 373 4th Ave., $12,710. Noted Aug. 9.

Pa., Franklin—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received only bid from W. H. Fissell, 1328 Bway., New York City, $98,600 limestone and $104,600 sandstone. Noted July 26.

Pa., Harrisburg—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids extension to post office from A. Wildman, 2206 North 3rd St., $58,200; Gohl & Bruaw, 310 Strawberry St., $59,198; J. L. Menough & Son, York, $69,875.

Pa., Phila.—Heating System—Bureau of Yards and Docks, Navy Dept., Wash., received low bids heating system for machine and electrical shop, Navy Yard, from Mathis Bros. Co., Archer Ave. and Canal St., Chicago, $33,892; H. L. Crook Co., Inc., 28 Light St., Baltimore, $40,467; G. R. Bullen, 600 North Howard St., Baltimore, $41,888. Noted Aug. 16.

★**Pa., Phila.**—Heating Apparatus—Bureau of Yards and Docks, Navy Dept., Wash., let contract humidifying and heating apparatus in aircraft factory at Navy Yard to Carrier Eng. Co., Land Title Bldg., $74,500.

Wash., D. C.—Magazine Storehouses—Bureau of Yards and Docks, Navy Dept., received low bids (a) 2 storehouses at Lake Denmark, N. J., (b) 1 at Ft. Mifflin, Pa., (c) 1 at St. Julians Creek, Va., (1) work complete, (2) work complete, except columns, etc., as follows: Columbus Circle Co., 51 East 42nd St., (a-1) $106,000, (a-2) $96,000; Hamilton-Chambers Co., Inc., 29 Bway., (a-1) $116,260, (a-2) $110,814; Snare & Triest, Woolworth Bldg., (a-1) $121,400, (a-2) $122,300, all of New York City; J. H. Miller, Eutaw and Franklin Sts., Baltimore, (b-1) $64,700, (b-2) $62,700; J. H. Wiese, 1301 City Natl. Bank, Omaho, (b-1) $64,750; W. W. Austine & Co., Transportation Bldg., Phila., (b-1) $98,545, (b-2) $92,925; Boyle-Robertson Constr. Co., Inc., Evans Bldg., (c-1) $66,205, (c-2) $66,125 W. H. Fissell & Co., 1328 Bway., New York City, (c-1) $106,200, (c-2) $102,200. Noted Aug. 9.

Wash., D. C.—Storehouse—Bureau of Yards and Docks, Navy Dept., received low bids storehouse at Hampton Roads, (a) work complete, (b) addition, (c) addition, as follows: Cramp & Co., Denckla Bldg., Phila., (a) $480,000, (b) $24,500, (c) $24,300; Jas. Stewart & Co., Inc., 30 Church St., New York City, (a) $487,200, (b) $25,000, (c) $28,000; Industrial Eng. Co., 30 Church St., New York City, (a) $510,000, (b) $27,000, (c) $28,000. Noted Aug. 23.

S. C., Charleston—Shell House, etc.—Bureau of Yards and Docks, Navy Dept., Wash., received low bids 1 shell house, 1 torpedo storehouse and 1 magazine building at Navy Yard and Naval Ammunition Depot, (work complete), from Simons-Mayrant Co., Charleston, $121,480; Boyle-Robertson Constr. Co., Inc., Evans Bldg., Wash., $134,051; W. T. Hadlow & Co., 831 Park St., Jacksonville, $147,000. Noted Aug. 9.

★**Fla., Key West**—Residence and Pump House—Fish Comn., Dept. Commerce, let contract residence and pump house at Marine Biological Sta. to Fuquay & Gheen, Daytona, $19,000. Noted Aug. 2.

★**Tenn., Memphis**—Aviation School—Constructing Officer, Aviation Sect., Army Signal Corps, let contract to Thomas, Harmon & Co., St. Louis, about $750,000.

★**Ky., Lancaster**—Post Office—J. A. Wetmore, superv. archt. treas. dept., Wash., let contract to A. W. Lane, 19 South La Salle St., Chicago, $28,496. Noted Aug. 23.

★**O., Dayton**—Aviation School—Constructing Officer, Aviation Sect., Army Signal Corps, let contract to Frank Hill Smith, 1035 Riebold St., about $400,000.

★**O., Lowell**—Sand and Gravel—W. P. Stokey, Major, Corps of Engrs., Cincinnati, let contract furnishing sand and gravel for recaping Dam No. 3, Muskingum River, to Marietta Sand Co., St. Clair Bldg., Marietta.

★**Tex., Ft. Worth**—Aviation School—Constructing Officer, Aviation Sect., Army Signal Corps, let contract to J. W. Thompson Co., Boatmen's Bank Bldg., St. Louis, cost between $1,500,000 and $2,000,000.

★**Tex., Waco**—Aviation School—Constructing Officer, Aviation Sect., Army Signal Corps, let contract to F. H. Jones, Dallas, about $750,000.

★**Tex., Wichita Falls**—Aviation School—Constructing Officer, Aviation Sect., Army Signal Corps, let contract to Gilsonite Co., Wainright Bldg., St. Louis, about $800,000.

Colo., Glenwood Springs—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, Aug. 29, as follows: Chas. Weitz Sons, 713 Mulberry St., Des Moines, $76,200; J. H. Wiese, 1301 City Natl. Bank Bldg., Omaha, $79,790; A. Goodhan, Wahoo, Neb., $92,000. Noted Aug. 9.

MISCELLANEOUS

Proposed Work

Memorial Court—New York, N. Y.—Columbia University had plans prepared by McKim, Mead & White, archts., 101 Park Ave., for Van Anaringe Memorial Court in South Field. About $17,000.

Elimination Grade Crossings—Syracuse, N. Y.—New York Central R.R. preparing plans. G. W. Kittredge, New York, ch. engr.

Elimination of Grade Crossings—Madison, N. J.—Boro. Council authorized bond issue of $159,000.

Pier—Marcus Hook,, Pa.—Texas Co. plans to extend pier at plant here 186 ft.

Creek Improvements—Norfolk, Va.—Finance Com. appropriated $20,000 improvements to Smith's Creek and $10,000 for Newton's Creek. W. H. Taylor, Jr., city engr.

Garbage Disposal Plant—Ashland, W. Va.—City plans election to vote on $250,000 bonds to build garbage disposal plant.

Marine Ways—Brunswick, Ga—American Shipbuilding Co. will build 3 additional marine ways on river front. M. Brown, 11 Bway., New York City, vice-pres. and genl. mgr.

Seawall—Fla., West Palm Beach—See "Streets and Roads."

Pipe Line—Lexington, Ky.—Cumberland Pipe Line Co., will increase capital from $1,000,000 to $1,500,000, to enlarge and extend Irvine pipe line. H. B. Robinson, ch. engr.

Incinerator—Paducah, Ky.—(Official)—City postponed building incinerator until 1918 as there is no appropriation available for work. Noted Aug. 2.

Incinerator—Hibbing, Minn.—City purchased 80-acre site and will build incinerator and gas plant. E. D. Hawley, city engr.

Levee—Newport, Ark.—Newport Levee Dist., Jackson Co., retained Morgan Eng. Co., Goodwin Institute to prepare plans and supervise construction of levee work.

Subway—El Paso, Tex.—Citizens defeated $150,000 bond issue to build, under railway tracks. G. Espy, city engr.

Park—Hugo. Okla.—City voted $15,000 bonds to build park.

Dam—Baker, Ore.—Lower Powder Irrigation Co. retained J. W. Bailey, city engr., to prepare plans for rein.-con. dam on Lower Powder River.

Harbor Improvements—Hermosa Beach, Cal.—City election Sept. 18th to vote on $100,000 bonds for harbor improvements.

BIDS DESIRED

Freight Conveyors—Albany, N. Y.—(Official)—Until Sept. 12, by W. W. Wotherspoon, supt. pub. wks., Capitol, furnishing and installing under Contract No. 103-A; advertised in this issue.

Flood Protection—Corning, N. Y.—(Official)—Until Sept. 19, by Bd. Pub. Wks., conduits and appurtenances for improvement of Monkey Run; advertised in this issue. Noted May 10.

Electric Work—Farmingdale, N. Y.—(Official)—Until Sept. 11, by Hon. W. W. Mills, secy. bd. trustees, 1224 Woolworth Bldg., New York City, electric work at New York State School Agriculture; advertised in this issue.

Retaining Wall—Newton, N. J.—Until Sept. 17, by Bd. Freeholders Sussex Co., rein.-con., 1st section Ross's Corner Sussex Rd. H. Snook, co. engr.

Harbor Improvements—Mobile, Ala.—(Official—Until Sept. 25, by H. Pillans, mayor, for harbor improvements at Arlington site. About $600,000. W. Smith, city engr. Noted Aug. 23.

Piling—Columbus, O.—(Official)—Until Sept. 10, by Dept. Pub. Wks., State House Annex, driving protection piling in Cuyahoga River along foot of bank of Ohio and Erie Canal. J. I. Miller, supt.

Retaining Wall—Dayton, O.—(Official)—Until Sept. 20 by Montgomery Co. Comrs., rein.-con., on Owl Creek, Miami Twp. W. H. Aszling, clk.

Miscellaneous (Continued)

Creek Improvements—Lancaster, O.—Until Sept. 8, by Comrs. Fairfield Co., deepening, widening and improving channel of Rush Creek, Perry and Fairfield Cos.

Garbage Incinerator—Waukegan, Ill.—(Official)—Until Sept. 10, by City Council. J. H. Marseilles, clk., advertised in this issue.

Dock—Seattle, Wash.—Until Sept. 10 by Comrs. King Co., on Duwamish Waterway to serve Pacific Oil Mills, 1816 4th St., S. About $35,000. S. J. Humes, 3rd and James Sts., co. engr. Noted May 24.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Sluice Gates—South Boston, Mass.—(Boston P. O.)—State Highway Comn. Boston, let contract to Coffin Valve Co., Wollaston, $21,500.

Piers—Albany, N. Y.—(Official)—W. W. Wotherspoon, supt. pub. wks., received low bids piers, dolphins, etc., on Gowanus Bay, Brooklyn, Terminal Contr. No. 55, from Riverside Contr. Co., 39 Cortland St., $509,861; Snare & Triest, Woolworth Bldg., $557,343; G. W. Rogers Co., Inc., 29 Bway., $561,146; all of New York City. Noted July 26.

★Levee—Wainright, Mo.—Comrs. Callaway Co., Fulton, let contract levee to protect 1700 acres to Chas. Thompson, Omaha, about $2 ,000.

★Wharf—Orange, Tex.—Southern Pacific Ry. let contract 100-ft. wharf, 3rd St., to Midland Bridge Co., 504 Midland Bldg., Kansas City, Mo.

Tunnels—San Francisco, Cal.—Bd. Pub. Wks. received only bid building 18 mi. tunnels for Hetch-Hetchy Water supply project from R. C. Storrie & Co., 2379 Market St., about $9,250,000, which was rejected as too high. Noted July 19.

The City of San Juan, Porto Rico, is said to be experiencing greater building activity than at any previous time in its history, notwithstanding increased costs of labor and building materials. Not only has the war increased the cost of labor for building, but ocean freight rates have advanced enormously. As the greater part of building materials, such as cement, lumber, plumbing, electrical supplies, etc., are shipped from the United States, it may be seen that the costs of these articles are much higher than in the States.

In San Juan alone, a conservative cost of building under construction or just being completed would total well over $1,250,000. Work has been started on a five-story reinforced-concrete hotel to cost about $400,000. Construction will be pushed with rapidity and it is expected that the structure will be completed in July, 1918. A large hospital for the Presbyterian Board of Missions has recently been completed at a cost of approximately $150,000. This building is also of fireproof construction throughout, and has modern conveniences and appliances. The Bureau of Public Buildings of the Insular Government now has under construction in San Juan three modern school buildings aggregating a cost of $405,000. This is in addition to a large number of small schools and miscellaneous Government buildings now being built in other parts of the island.

A reinforced-concrete warehouse and office building for the Porto Rico American Tobacco Co. is nearly completed, in SanJuan. This, with the addition of a fifth floor to another of the company's factories, will cost $130,000. A concrete warehouse and office for the West India Co., in Puerta de Tierra, a section of San Juan, is practically complete, at an expenditure of $60,000. Several other smaller office buildings and port and pier improvements are under construction throughout various parts of the city. All these buildings are being constructed by local contractors and (with the exception of the hotel and the warehouse for the West India Co.) all have been designed by local architects.

A survey by United States Engineers of the Snake River, in the Northwest, was inaugurated Aug. 8, at Lewiston, Idaho. There has been no definite plan adopted as to the best method of making the river navigable the year round, but steamboat navigators who are acquainted with the stream hold the view that by the construction of a series of 10 dams, nine of these to be located on the Snake River and one on the Columbia, the rivers between Lewiston and the canal at Celilo can be made navigable the year round for boats up to 400 tons burden. Under this plan, four of these dams would create large electric power, while six would be simply of the lift type and of service only from a steamboat-navigation standpoint.

BARGE CANAL WORK—ALBANY, N. Y.

Contract No. 55

Bids were received by W. W. Wotherspoon, supt. pub. wks., for Contract No. 55, constructing pier, dolphins, etc., at Gowanus Bay, Brooklyn, from (A) Riverside Contr. Co., 39 Cortland St.; (B) G. W. Rogers Co., Inc., 29 Bway.; (C) Snare & Triest, Woolworth Bldg., all New York City; (D) Lupfer & Remick, Ellicott Sq., Buffalo. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
Removal of old material (lump sum)	$50.00	$120.00	$100.00
180 cu.yd. stone filling	1.00	1.80	1.[illegible]
365,600 lin.ft. foundation piles	.61	.63	.[illegible]6
315 fender piles	20.00	26.00	24.[illegible]
840 M. ft.b.m. sawed lumber	72.00	86.00	86.[illegible]
214 M. ft.b.m. sawed lumber—treated	79.00	96.00	95.[illegible]
78,000 sq.ft. surface treatment of timber	.01	.022	.02¾
460 cu.yd. third-class concrete	6.00	7.80	7.55
7,717 cu.yd. first-class reinforced concrete	14.75	15.00	14.[illegible]
750 cu.yd. sand-fill	.75	1.20	1.15
60 cu.ft. chipping concrete	1.00	2.20	2.00
185 lin.ft. drilling holes in exist. masonry	.50	1.20	1.15
600 lb. rigid metal conduit	.10	.12	.10
69,700 lb. steel castings	.10	.14	.14
6,900 lb. iron castings	.07	.084	.08
644,000 lb. metal reinforcement	.06	.07	.07
550,000 lb. structural steel	.06¾	.084	.08
12 spools	125.00	120.00	120.00
70 pile shoes	1.00	2.20	2.00
Extended totals	$509,861	$557,343	$561,146

Contract No. 147

Bids were received by W. W. Wotherspoon, supt. pub. wks., for Contract No. 147, constructing superstructure, substructure and approaches of bascule bridge over Tonawanda Creek on Main and Webster Sts., Tonawanda and North Tonawanda, from (A) Scherzer Rolling Lift Bridge Co., Monadnock Blk., Chicago; (B) Lupfer & Remick, Ellicott Sq.; (C) Lathrop, Shea & Henwood, Ellicott Sq.; (D) Peckham Constr. Co., $273,105, all of Buffalo. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
Plans for Strauss trunnion bascule bridge (lump sum)	$7,200.00	$7,200.00	$8,000.00
5,630 cu.yd. excavation	2.20	2.40	1.00
2,960 cu.yd. forming embankment	.15	.10	.15
1,940 cu.yd. first-class reinforced concrete	14.75	14.00	13.50
1,660 cu.yd. second-class reinforced concrete	12.00	14.40	10.50
870 cu.yd. second-class conceret	8.90	10.80	8.50
740,000 lb. structural steel	.08	.089	.12½
68,300 lb. machinery	.28	.24	.34
119,000 lb. metal reinforcement	.06	.052	.06
1,370 sq.ft. concrete sidewalk	.25	.20	.30
264 lin.ft. sandstone curbing	1.10	.90	1.00
242 sq.yd. brick pavement	3.00	3.00	2.50
388 sq.yd. wood block pavement on plank base	3.00	2.58	3.00
454 sq.yd. wood block pavement on concrete base	3.00	2.68	3.00
620 lin.ft. lattice railing	3.00	3.00	5.60
256 lin.ft. galvanized steel corner bar	.40	.30	.30
2,500 lb. metal duct	.15	.16	.16
7.4 M.F.B.N. Sheeting and bracing	60.00	60.00	72.00
8.8 M.F.B.M. sawed lumber	70.00	75.00	90.00
20.9 M.F.B.M. sawed lumber creosoted	80.00	96.00	96.00
Removing building (lump sum)	10.00	10.00	10.00
Maintaining navigation (lump sum)	350.00	360.00	300.00
Maintaining highway traffic (lump sum)	12,500.00	9,600.00	12,600.00
Operator's house (lump sum)	2,000.00	1,440.00	1,200.00
Plumbing (lump sum)	600.00	600.00	500.00
Electrical equipment (lump sum)	11,500.00	13,200.00	11,000.00
Maintenance accessories (lump sum)	300.00	300.00	250.00
Cofferdams, pumping, etc. (lump sum)	36,000.00	35,500.00	34,000.00
Extended totals	$233,986	$239,821	$257,047

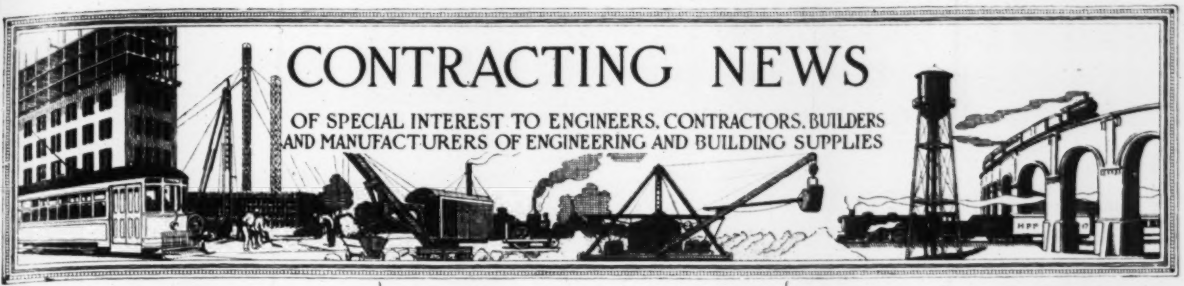
Contract No. 148

Bids were received by W. W. Wotherspoon, supt. pub. wks., Aug. 21, for Contract No. 148, constructing superstructure, substructure and approaches of highway bridge over Lock No. 27 and Clyde River on Leach St., Lyons, from (a) Lathrop, Shea & Henwood, Ellicott Sq. (awarded contract); (B) Lupfer & Remick, Ellicott Sq., both of Buffalo. The unit bids were as follows:

	A	B
11,100 cu.yd. excavation	$0.40	$0.50
23.7 M.F.B.M. sheeting and bracing	72.00	70.00
9,900 cu.yd. forming embankment	.18	.15
70 cu.yd. lining	1.50	1.25
2,140 cu.yd. second-class concrete	9.00	10.50
66 lin.ft. 10-in. vitrified pipe and specials	.60	.65
470 lin.ft. concrete curbing	1.25	1.40
870 sq.yd. waterbound macadam 9 in. thick	1.50	1.50
240 sq.yd. waterbound macadam 6 in. thick	1.20	1.20
83 cu.ft. cutting concrete	3.00	3.50
52 lin.ft. drilling holes in existing masonry	1.50	1.50
33 sq.yd. relaying second-class stone paving	1.20	1.10
720 lin.ft. wooden fence	.35	.40
298,000 lb. structural steel	.094	.09¾
2,730 lb. metal reinforcement	.07	.07
5,000 lb. 12-in. cast iron pipe	.05	.05
229 lin.ft. lattice railing	3.60	3.60
34.6 M.F.B.M. sawed lumber (lump sum)	96.00	95.00
Gutter basin (lump sum)	45.00	40.00
Removing superstructure of bridge and the stairway (lump sum)	10.00	10.00
Cofferdams, pumping, tailing and draining (lump sum)	4,200.00	4,200.00
Extended totals	$68,770	$72,096

By an overwhelming majority the citizens of Mobile, Ala., voted on Aug. 13 to authorize the City Commission to arrange a bond issue of $600,000 for the construction of a municipal water terminal. The project as designed comprises concrete wharves, piers and bulkheads, railroad connections to the water front and dredging to a depth of 30 ft. Warehouses are also included in the design but cannot be built within the present appropriation. The work will be in charge of City Engineer Wright Smith.

Minneapolis will spend $1,000,000 in new construction to increase its water supply. Eight filter beds, four of which are under construction now, will be completed about the end of 1918. When Minneapolis began treating its water-supply from the Mississippi River by mechanical filtration, in 1913, it started with 12 filter beds. In 1915 four were added, giving a filtration capacity of 56,000,000 gal. daily. The average consumption was 30,000,000 gal. daily, but during an extended dry period in 1916 the demand crept up to 59,000,000 gal.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 42 to 53 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Sept. 13.	Cleveland, O.	Aug. 30
Sept. 17.	Butte, Mont.	Sept. 13
Sept. 18.	Firebaugh, Cal.	Sept. 13
Sept. 20.	Mandan, N. D.	Sept. 13
Sept. 24.	Akron, O. Adv. Sept. 13.	Sept. 13
Sept. 25.	Jersey City, N. J.	Sept. 13
Sept. 26.	North McGregor, Ia. Adv. Sept. 13.	Sept. 13
Sept. 26.	North Tonawanda, N. Y. Adv. Sept. 13.	Sept. 13
Sept. 25.	Bayonne, N. J.	Sept. 13
Oct. 2.	Johnstown, N. Y. Adv. Sept. 13.	Sept. 13
Oct. 2.	Toronto, Ont.	Sept. 13

SEWERS

Bids Close		See Eng. News-Record
Sept. 17.	Cleveland Heights, O. (Warrensville P. O.)	Aug. 30
Sept. 17.	Butte, Mont.	Sept. 13
Sept. 17.	South Orange, N. J.	Sept. 13
Sept. 18.	Caledonia, Minn.	Sept. 13
Sept. 21.	Detroit, Mich. Adv. Sept. 13.	Sept. 13
Sept. 22.	Stamford, Conn. Adv. Sept. 13.	Sept. 13
Sept. 24.	Bridgeport, Conn. Adv. Sept. 13.	Sept. 13
Sept. 24.	Rocky River, O.	Sept. 13
Sept. 28.	Cedar Rapids, Ia.	Sept. 13
Sept. 25.	Columbia, S. C.	Sept. 13
Sept. 29.	Hagerstown, Md. Adv. Sept. 13.	Sept. 13

BRIDGES

Bids Close		See Eng. News-Record
Sept. 17.	Woonsocket, R. I. Adv. Sept. 6.	Sept. 6
Sept. 17.	Eufaula, Okla.	Sept. 13
Sept. 17.	Mason City, Ia.	Sept. 13
Sept. 18.	Paducah, Ky.	Sept. 13
Sept. 18.	Santa Ana, Cal.	Sept. 6
Sept. 19.	Wausau, Wis.	Sept. 13
Sept. 20.	Rockford, Ill.	Sept. 13
Sept. 20.	Du Bois, Pa.	Sept. 6
Sept. 20.	Butler, Pa. Adv. Sept. 6 and 13.	Sept. 6
Sept. 21.	St. Joseph, Mo.	Sept. 13
Sept. 24.	Los Angeles, Cal.	Sept. 13
Sept. 27.	Jersey City, N. J.	Sept. 13
Sept. 28.	Akron, O. Adv. Sept. 13.	Sept. 13
Oct. 2.	Albany, N. Y. Adv. Sept. 6.	Sept. 6
Oct. 2.	Columbus, O. Adv. Sept. 13.	Sept. 13
Oct. 4.	Texarkana, Tex. Adv. Sept. 13.	Sept. 13

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 10.	Washington	Aug. 30
Sept. 10.	Wallace, Idaho	Aug. 30
Sept. 10.	Cherokee, Ia.	Sept. 6
Sept. 10.	Mankato, Minn.	Sept. 6
Sept. 10.	Louisa, Ky.	Sept. 6
Sept. 10.	Trenton, N. J.	Sept. 6
Sept. 10.	Quincy, Mass.	Sept. 6
Sept. 11.	Concordia, Kan.	Sept. 6
Sept. 11.	Sacramento, Cal.	Aug. 30
Sept. 11.	Buffalo, Minn.	Sept. 6
Sept. 12.	Kansas City, Mo.	Sept. 6
Sept. 12.	Springfield, Ohio	Sept. 6
Sept. 12.	Indianapolis, Ind.	Sept. 6
Sept. 12.	Rhode Island Adv. Sept. 6.	Sept. 6
Sept. 14.	Parkersburg, W. Va.	Sept. 6
Sept. 15.	Visalia, Cal.	Aug. 30
Sept. 16.	Pocatello, Idaho	Sept. 6
Sept. 17.	Indianapolis, Ind.	Sept. 6
Sept. 17.	South Pasadena, Cal.	Sept. 13
Sept. 17.	Everett, Wash.	Sept. 13
Sept. 17.	Paris, Ill.	Sept. 13
Sept. 17.	San Bernardino, Cal.	Sept. 13
Sept. 17.	West Frankfort, Ill.	Sept. 13
Sept. 17.	Frankfort Heights, Ill.	Sept. 13
Sept. 18.	Morrison, Ill.	Sept. 6
Sept. 18.	Hohenwald, Tenn.	Aug. 23
Sept. 19.	Seattle, Wash.	Aug. 23
Sept. 19.	Riverside, Cal.	Sept. 13
Sept. 20.	Albany, N. Y. Adv. Sept. 6 and 13.	Sept. 6
Sept. 20.	New York, N. Y.	Sept. 6
Sept. 20.	Newkirk, Okla.	Sept. 13
Sept. 20.	Cincinnati, O.	Sept. 13
Sept. 20.	Miami, Fla.	Sept. 13
Sept. 21.	Charleston, W. Va.	Sept. 6
Sept. 22.	Cameron, La.	Aug. 30
Sept. 22.	Racine, Wis.	Sept. 13
Sept. 24.	Eutaw, Ala.	Sept. 6
Sept. 24.	Livingston, Ala.	Sept. 6
Sept. 24.	Newburgh, N. Y. Adv. Sept. 13.	Sept. 13
Sept. 25.	Indiana	Sept. 13
Sept. 25.	New Orleans, La.	Sept. 13
Sept. 25.	New Jersey	Sept. 13
Sept. 25.	Carrollton, Ala.	Sept. 6
Sept. 27.	Salt Lake City, Utah	Sept. 13
Sept. 30.	Indianapolis, Ind.	Sept. 6
Oct. 1.	Lincoln, Neb.	Sept. 6
Oct. 6.	Bowling Green, O.	Sept. 13
Oct. 11.	Oneonta, Ala.	Sept. 13
Oct. 15.	Newark, N. J.	Sept. 13
Oct. 16.	Cape May, N. J.	Sept. 6

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Sept. 15.	Statham, Ga.	Sept. 13
Sept. 17.	Clarion, Ia.	Sept. 13
Sept. 18.	Moorhead, Minn.	Sept. 6
Sept. 18.	Wabash, Ill.	Sept. 13
Sept. 18.	Red Oak, Ia.	Sept. 13
Sept. 20.	Rensselaer, Ind.	Sept. 13
Sept. 21.	Modesto, Cal.	Sept. 6
Sept. 21.	Paxton, Ill.	Sept. 6
Sept. 24.	Barstow, Tex.	Sept. 13
Sept. 24.	Lewiston, Ill.	Sept. 13
Oct. 1.	Albany, N. Y. Adv. Sept. 13.	Sept. 13
Oct. 2.	St. Cloud, Minn.	Aug. 2
Oct. 2.	Urbana, Ill.	Sept. 6
Oct. 15.	Willmar, Minn.	Sept. 13

BUILDINGS

Bids Close		See Eng. News-Record
Sept. 15.	Spirit Lake, Ia.	Aug. 9
Sept. 15.	Bathurst N. B.	Aug. 30
Sept. 15.	Kasson, Minn.	Sept. 13
Sept. 15.	Cleveland Heights (Warrensville, P. O.) O.	Sept. 13
Sept. 17.	Abington, Pa.	Sept. 13
Sept. 21.	Oroville, Cal.	Sept. 13
Sept. 21.	Chester, Pa.	Sept. 6
Sept. 28.	Theills, N. Y. Adv. Sept. 13.	Sept. 13
Oct. 3.	Cresco, Ia.	Sept. 13
Oct. 5.	Thiells, N. Y. Adv. Sept. 13.	Sept. 13
Dec. 1.	Norfolk, Va.	Sept. 13

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Sept. 17.	Tampa, Fla.	Sept. 6
Sept. 17.	Mare Island (Vallejo P. O.) Cal.	Sept. 13
Sept. 18.	Memphis, Tenn.	Sept. 13
Sept. 18.	Cape Henry, Va. Adv. Aug. 30 and Sept. 6.	Aug. 30
Sept. 21.	Kendallville, Ind. Adv. Aug. 16 and 23.	Aug. 16
Sept. 24.	Farmington, N. M.	Sept. 6
Sept. 24.	New London, Conn.	Sept. 13
Sept. 24.	Washington, D. C.	Sept. 13
Sept. 25.	Washington, D. C. Adv. Aug. 30.	Aug. 30
Sept. 26.	Memphis, Tenn. Adv. Sept. 6 and 13.	Sept. 6
Sept. 28.	Key West, Fla.	Sept. 13
Sept. 28.	Washington, D. C.	Sept. 13
Sept. 28.	Boston, Mass. Adv. Sept. 13.	Sept. 13
Oct. 1.	Twin Falls, Idaho	Aug. 30
Oct. 1.	Louisville, Ky.	Sept. 13
Oct. 1.	Cleveland, Ohio	Sept. 6
Oct. 2.	San Francisco, Cal.	Sept. 6
Oct. 2.	Wheeling, W. Va.	Sept. 13
Oct. 4.	Boston, Mass.	Sept. 13
Oct. 4.	St. Peter, Minn.	Sept. 6
Oct. 6.	Newport, R. I. Adv. Sept. 13.	Sept. 13
Oct. 12.	Bad Axe, Mich.	Sept. 13
Oct. 15.	Denver, Colo. Adv. Sept. 13.	Sept. 13
Oct. 15.	Waynesboro, Va.	Sept. 13
Oct. 30.	Key West, Fla. Adv. Sept. 6 and 13.	Sept. 6

MISCELLANEOUS

Bids Close		See Eng. News-Record
Sept. 17.	Retaining Wall — Newton, N. J.	Sept. 6
Sept. 19.	Flood Protection—Corning, N. Y. Adv. Sept. 6 and 13.	Sept. 6
Sept. 19.	Sewer Flushing Machine—New Bedford, Mass. Adv. Sept. 13.	Sept. 13
Sept. 20.	Retaining Wall — Dayton, O.	Sept. 6
Sept. 25.	Harbor Improvements — Mobile, Ala.	Sept. 6
Sept. 28.	Incinerating Plant or Crematory—Trenton, N. J.	Sept. 13
Sept. 28.	Pier—Philadelphia, Pa. Adv. Sept. 13.	Sept. 13
Nov. 15.	Flood Control—Dayton, O. Adv. Sept. 13.	Sept. 13

Where name of official is not given, inquiries should be addressed to City Clerk County Clerk or corresponding official.

WATER-WORKS

Proposed Work

Conn., Meriden—City plans to install filtration plant. D. J. Donovan, mayor. About $25,000.

Conn., Stratford—See "Sewers."

N. J., Newark—Council plans to issue $250,000 bonds to improve Oak Ridge reservoir. G. Sanzenbacher, supt.

Miss., Charleston—City plans to issue $13,500 bonds for waterworks system. H. E. Smith, city engr.

Tenn., Knoxville—City to sell $800,000 bonds for water, sewer, school and street improvements. J. B. McCalla, city engr. Noted May 3.

O., Dayton—City to sell $380,000 bonds to extend and improve waterworks system. F. O. Eichelberger, city engr.

Water-Works (Continued)

O., Dayton—City had plans prepared by Metcalf & Eddy, engrs., 14 Beacon St., Boston, Mass.; building reservoir in southeastern part of city. About $290,000. Noted Aug. 23.

N. B., St. John—City soon lets contract extending water-works, involving 5000 ft. pipe.

O., Lorain—(Official)—City to issue $18,000 bonds to improve water-works system. C. M. Osborne, supt.

Mich., Alma—See "Sewers."

Mich., Bessemer—See "Sewers."

Ill., East St. Louis—East St. Louis Interurban Water Co. plans to issue $1,000,000 bonds to build high-pressure main from pumphouse to Granite City, also new settling basins.

Wis., Tomahawk—City plans to build and equip pumping station and install water mains. About $10,000. J. L. Extrom, clk.

Ia., Farnhamville—City voted $10,000 bonds to build water mains.

Minn., Albert Lea—City plans reservoir, 1,500,000 gal. capacity. About $20,000. W. L. Beedle, supt.

Minn., St. Paul—City to sell $100,000 bonds Sept. 19 to build waterworks. G. House, supt.

Neb., Pender—City voted $16,560 bonds for electric light and waterworks improvements. H. Brandt, supt.

Mont., Great Falls—City having plans prepared building 24-in. c.-i. water main, 7 160 ft. long from filter to 12th St., replacing wooden intake with cast-iron pipe, 700 ft. long, also 12,000 ft. storm sewer. T. B. Evanson, city engr.

Tex., Austin—City Comn. purchased Barton Springs about 1 mi. from Austin, which have daily average output of 10,000,000 gal. water. This water supply will be brought to city by means of pumping plant and concrete conduit that will be laid part of way under bed of Colorado River. E. C. Bartholomew, supt.

Okla., Beaver—City plans to issue $17,000 bonds to build water-works system.

Okla., Coyle—City Council authorized $13,000 bond issue to improve water-works system. Address the Mayor.

Okla., Granite—City voted bonds to build water-works system. H. Arnett, supt. Noted Aug. 16.

Okla., Guthrie—City plans election to vote on $30,000 bond issue to build river reservoir and 1 or 2 dams. J. E. Nissley, mayor.

Okla., Indiahoma—City election Sept. 28 to vote $15,000 bond issue to build waterworks system. A. Finigan, pres.

Okla., Miami—City election soon to vote on $100,000 to build water-works and electric-light systems. A. L. Saylors, supt. Noted Aug. 23.

Okla., Shamrock—City plans to build water-works system. About $40,000. Macintosh-Walton Eng. Co., 1023 State Natl. Bank Bldg., Oklahoma, engrs. Noted Aug. 23.

Okla., Waurika—City having plans prepared building dam and filtration plant. H. Treadwell, city clk. Noted Aug. 30. About $20,000.

Okla., Waurika—City sold $15,000 bonds to install filtration plant and build dam.

Utah, Enterprise—See "Excavation and Dredging."

Wash., Ilwaco—Council passed ordinance to issue $82,550 bonds to improve light and water-works systems. E. S. Wood, supt.

Wash., Pasco—City having plans prepared by Sawyer Bros., engrs., White Bldg., Seattle, for building water-works system. About $158,000.

Cal., San Bernardino—City having plans prepared by F. C. Finkle, engr., 448 Hellman Bldg., Los Angeles, for extending and improving water-works system.

Cal., Sanoma—City had plans prepared for waterworks system. About $45,000. T. Lewis, city engr.

O., Greenville—City soon lets contract water-works improvements. About $60,000. G. Johnson, 150 Nassau St., New York City, engr. Noted July 12.

Ont., Crowland Twp.—Town having plans prepared for extending water-works, 3300 ft. 10-in. c.-i. pipe.

Ont., Port Dover—City having plans prepared by James, Louden & Hertzberg, engrs., Excelsior Life Bldg., Toronto, for water-works system. About $65,000.

Ont., Port Dover—City voted $65,000 bonds to build water-works system. J. Sloan, clk. Noted May 31.

BIDS DESIRED

N. Y., Johnstown—(Official)—Until Oct. 2, by Water Comrs., for storage reservoir, earthen dam, spillway and appurtenances on Center Creek. W. E. Nathanson, city engr.; advertised in this issue.

N. Y., North Tonawanda—(Official)—Until Sept. 26, by F. C. Goltz, city clk., for 1300 ft. 4-ft. c. i. wood or concrete intake water pipe; advertised in this issue.

N. Y., Thiells—See "Buildings."

N. J., Bayonne—(Official)—Until Sept. 25, by Bd. Comrs., laying water mains and appurtenances. About $20,000. W. L. Clarkson, city engr. Noted Aug. 30.

N. J., Jersey City—(Official)—Until Sept. 25, by F. A. Dolan, city clk., furnishing and delivering c.-i. water pipe.

O., Akron—(Official)—Until Sept. 24, by C. F. Beck, dir. pub. ser., building elevated steel water tank; advertised in this issue.

Ia., North McGregor—(Official)—Until Sept. 26, for waterworks system; advertised in this issue.

N. D., Mandan—(Official)—Until Sept. 20, by City, for 2,000,000-gal. reservoir, at Missouri River pumping station, together with necessary pumping arrangement. About $600,000. Black & Griffin, Mandan, N. D., engrs.

Mo., Hamilton—(Official)—Until Sept. 17, by City, for water-works system, including 7800 cu.yd. earth excava., 217 cu.yd. concrete, sluiceway and intake pipe, centrifugal pump, 10,880 ft. 6-in. c.i. pipe, 4500 ft. c.-i. specials, 30,000 gal. wooden tank and 75-ft. steel tower, etc. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs. Noted July 26.

Cal., Firebaugh—Until Sept. 18, by C. W. Hawks, city clk., for water-works system.

Ont., Toronto—Until Oct. 2, by Wks. Dept. for stop valves, valve operating pumps and special castings for main pumping station.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★O., Akron—(Official)—City let contract No. 85 for laying 30-in. water main in Buchtel Ave. to Gessner Co., Toledo, $32,608.

★O., Akron—(Official)—City let Contr. No. 80, furnishing about 200 fire hydrants, 6 to 8 in., to Rensselaer Valve Co., Ontario, $12,668; Cont. No. 86, furnishing water meters, 5000 ⅝-in., 210 ¾-in. to 2-in., to Gamon Meter Co., 282 South St., Newark, N. J., $42,710. Noted Aug. 16.

★Wis., Shawano—(Official)—City let contract extending water-works system to Delos Eng. & Contg. Co., Prairie du Chien, $12,980. Noted Aug. 30.

★Minn., Fairmount—City let contract installing 3 mi. water mains to J. Rea, Fairmount.

★Kan., Liberal—City let contract waterworks improvement to C. H. Everett, Hutchinson, $12,405. Noted July 26.

★Okla., Lawton—City let contract improving and extending water-works system from here to Ft. Sill, involving 30,000 ft. 24-in., 18,000 ft. 14 in. and 6400 ft. 12 in. c.-i. pipe to N. S. Sherman Machine and Iron Wks., 18 East Main St., Oklahoma. $375,000. Noted Aug. 23.

★Que., Outremont—City let contract filter and filtration plant rein.-con. and brick, to A. Bastien, 372 Ave. de l'Epee, $40,000.

SEWERS

Proposed Work

Mass., Springfield—City having plans prepared building new sewer drainage system. About $250,000. F. H. Clark, city engr.

Conn., Greenwich—(Official)—Boro voted $350,000 to build sewerage system and sewage disposal plant in Sound Beach Sect. S. E. Minor, boro. engr., C. Potts, 30 Church St., New York City, const. engr.

Conn., Stratford—City having plans prepared by C. Potts, 30 Church St., New York City, for sewerage system and pumping station. About $200,000. Noted Apr. 19.

N. Y., Frankfort—Town plans to build new sewage disposal plant. About $[illegible] J. Garvey, clk.

N. J., Jersey City—City having plans prepared for trunk sewer from Dover to new Boonton Dam. C. A. Van Keuren, city engr.

N. J., Newark—Bd. St. and Water Comrs. approved ordinance to build new sewer in Sanford Ave. M. R. Sherrard, city engr.

N. J., Princeton—Boro. having plans prepared improving sewerage system, north-east field and sewage disposal plant in northwest field. V. B. Cook, clk.

N. J., Trenton—City had plans prepared for trunk sewer from Dover to Boonton dam. J. R. Fell, Jr., city engr.

Pa., Lewisburg—Council passed ordinance to issue $25,000 bonds for sewage disposal plant. S. McComber, city engr.

Tenn., Knoxville—See "Waterworks."

Ky., Louisville—Bd. Pub. Wks. having plans prepared for sewer on Indiana Ave. D. R. Lyman, city engr.

Ky., Maysville—City election soon to vote on $100,000 bond issue to build sewerage system. J. W. Lee, mayor.

O., Akron—City plans to build sewer in portions Carpenter St. J. A. Gehres, city engr.

O., Batavia—Council passed ordinance building sewer portion Spring St. J. Boehmer, city engr.

O., Canton—Council passed ordinance building sanitary sewer portion 17th St. W. E. Sarver, city engr.

O., Canton—(Official)—City to issue $70,000 bonds to build storm water sewers. C. A. Stolberg, mayor.

O., Cleveland—City plans to install sewer in Hartley Rd. R. Hoffman, city engr.

O., Lima—City plans $225,000 bond issue to build relief sewers. C. Bryson, city engr.

O., Lorain—Council passed ordinance building sanitary sewer portion Parkview Ave. and lateral storm sewer portion 7th St. C. M. Osborne, city engr.

O., Toledo—(Official)—City election Nov. 6th to vote on $2,800,000 bond issue to build disposal and pumping plants. H. C. McClure, city engr. Noted Sept. 6.

O., Urbana—Council passed ordinance to build sanitary sewer portions Windsor Ave. E. F. Sweetman, city engr.

Mich., Alma—City voted bonds for following improvements: $40,000 sewers, $76,000 waterworks and $10,000 paving. Noted June 7.

Mich., Bessemer—City voted $150,000 bonds to build sewerage, water-works systems and pave number of streets. W. L. Guyer, supt.

Mich., Holly—City plans to build steel tank, 100,000 gal. capacity, also to install electrically operated pumps. About $15,000.

Mich., Lansing—City plans to build sewers in portions North, Fremont and Robertson Sts., involving 11,370 ft. pipe. H. W. Sparks, city engr.

Mich., Trenton—Village election soon to vote on $14,000 bond issue to build trunk sewer; plans also being prepared for surface sewer on Washington Ave. Noted June 14.

Ill., Bloomington—Council passed ordinance to build sewerage system on west side. About $18,500. E. H. Packard, city engr.

Ill., Normal—Bd. Local Improv. plans 24-in. pipe sewer in Adelaide St., 9393 ft. long. About $18,500. Mellerish & Broghill, designing engr.

Wis., La Crosse—City plans to build 3 blocks, 10 and 12-in. vitr. pipe sewers. G. Bradish, city engr.

Ia., Sioux City—Council passed resolution for sanitary sewer in portions Linn St. and Washington Ave. T. H. Johnson, city engr.

Minn., Virginia—City having plans prepared for sanitary sewerage system. E. F. Johnson, city engr.

Mont., Great Falls—See "Water-Works."

Mont., Poplar—Town to sell $25,000 bonds Sept. 25 for waterworks system. W. E. Englehart, clk. Noted Aug. 30.

Mo., Kansas City—Bd. Pub. Wks. soon lets contract sewer in Dist. No. 356, Div. No. 5. About $90,000. C. Hill, city engr.

Sewer (Continued)

Tex., El Paso—City had plans prepared for sewage-disposal plant. About $100,000. G. E[illegible], city engr.

Okla., Purcell—City plans to improve sewerage system. W. G. Blanchard, mayor.

Wash., Seattle—City had plans prepared building sewers in 22nd Ave., S. W., $56,-933, Rainier Ave., trunk sewer, $222,640. A. H. Dimock, city engr.

Ore., Astoria—City soon lets contract building sewers on several streets. G. T. McCrean, city engr.

Ore., Portland—City plans to build sewers in portions East 65th, East 47th, East 28th, East 37th and East 69th Sts. P. H. Dater, city engr.

BIDS DESIRED

Conn., Bridgeport—(Official)—Until Sept. 24, by Paving & Sewer Comn., Sects. 3 and 4 Northwest Sanitary trunk sewer. B. Keating, secy.; advertised in this issue.

Conn., Stamford—(Official)—Until Sept. 22, by Sanitation Comn., building sewage-disposal plant. A. L. Schavoir, chn.; advertised in this issue.

N. Y., Thiells—See "Buildings."

N. J., South Orange—Until Sept. 17, by St. & Highway Com., building storm sewer in Montrose Ave. I. T. Redfern, village engr.

Md., Hagerstown—(Official)—Until Sept. 29, by Sewerage Comn., installing main and lateral sewers in various streets. E. Le Roy Heard, secy.; advertised in this issue.

S. C., Columbia—Until Sept. 25, by City, building sanitary sewer outfall, Columbia Canal and Smith's Branch, involving 6725 ft. 18-in. and 23,000 ft. 15-in. vitr. clay pipe, 2775 ft. 18-in. and 3320 ft. 15-in. rein.-con. pipe. About $50,000. T. K Legare, city engr.

O., Cleveland Heights—(Warrensville P. O.)—(Official)—Until Sept. 17, by H. H. Canfield, village clk., for brick segment block and vitr. pipe sewer in Taylor-Caledonia Sewer Dist. No. 5. F. A. Pease, Eng. Co., 804-812 Marshall Bldg., Cleveland, village engrs.

O. Rocky River—Until Sept. 24 (change of date), by F. Mitchell, city clk., constructing sewage disposal plant, sewers and flushing tank. E. Hamold, city engr. Noted Aug. 23.

Mich., Detroit—(Official)—Until Sept. 21, by Dept. Pub. Wks., extending Evans Tire and Central Aves., Morrell St. and Lynch Rd. sewers. C. F. Hubbell, city engr; advertised in this issue. Noted Aug. 16.

Ia., Cedar Rapids—Until Sept. 28, by City, sanitary sewers in 27th and 30th Sts. and 1st Ave., E., including 210 ft. 10-in., 1135 ft. 8-in., 2421 ft. 6-in. pipe, 13 manholes and 3 flush tanks. C. H. Streeter, city engr.

Minn., Caledonia—(Official)—Until Sept. 18, by Village, building 18,000 ft. 8- to 15-in. vitr. sewer and disposal tank. D. C. Merlo, recorder. J. F. Druar, 314 Commercial Bldg., St. Paul, engr. Noted Aug. 30.

Mont., Butte—(Official)—Until Sept. 17, by Silver Bow Co. Comrs., for building sanitary sewers in Special Improv. Dist. No. 1, and outlet sewer, involving 4283 lin.ft. 8-in. vitr. pipe, 8 manholes, etc. S. A. Anderson, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., East Boston—(Boston, P. O.)—(Official)—Dept. Pub. Wks., Boston, let contract sewer in Faywood Ave. to F. Drinkwater, 25 Hemlock St., West Roxbury, $710,200. Noted Sept. 6.

★N. Y., Brooklyn—L. H. Pounds, boro. pres., let contract building sewers portions Vermont Ave. and Highland Blvd., to Kenmore Contg. Co., 6102 18th Ave., $14,090. Noted July 26.

★N. Y., Brooklyn—L. H. Pounds, boro. pres., let contract building sewers portions Snediker Ave. and sewer basin on Bedford Ave., northwest corner Glenwood Rd., to E. Ghelardi Contg. Co., 1217 47th St., 86% and 150% respectively. Noted Aug. 30.

★N. Y., New York—(Official)— M. M. Marks, boro. pres., let contract installing sewer 91st St. between North River and Riverside Dr. to Lawrence Constr. Co., 96 B'way., $10,100. Noted Aug. 23.

★O., Bedford—City let contract building sewers to Curro Bros., 1977 East 126th St., Cleveland. Noted June 28.

★O., Cleveland—City let contract building drainage sewer inclosing public hall property to Hoag & Dall, 518 Commercial Bldg., $100,000.

★O., Columbus—Dept. Pub. Ser. let contract relief sewer and repaving various streets to I. O. Jones, 707 Grove St., $14,-444. Noted Aug. 16.

★O., Mt. Vernon—City let contract building sanitary sewers and paving portion Wooster Ave. to S. T. Knight, Columbus; Mansfield Ave. sewer to W. H. Hearn, Mt. Vernon. Noted June 28.

★Ind., Gary—City let contract building sewer in Dist. No. 38 to J. Aconcle, Gary, $13,984.

★Wis., Green Bay—City let contract laying 12-in. sewers in Norwood Ave., St. Clair and Stuart Sts. to H. O. Schaefer, and M. Van Oss, Green Bay.

★Ia., Conrad—Town let contract building sewerage system, outlet and disposal plant, to Cole Bros., Ames, $16,840.

★Ia., Sheldon—City let contract sewage disposal plant to G. Gardner, Sheldon, $11,842.

★Minn., Ely—City let contract filtration plant to New York Continental Jewell Filtration Co., 15 Bway., New York City, $18,000.

★Mo., Kansas City—City let contract sewer in Dist. No. 438, Div. No. 5, to Halpin-Boyle Constr. Co., 709 Ry. Ex. Bldg., $18,438.

★Tex., McKinney—City let contract building sewage-disposal plant to Cabell & Kelly, Scollard Bldg., Dallas, $25,000.

★Okla., Henryetta — City let contract sewers in Dists. Nos. 8 and 9 to W. J. Brittain Co., Henryetta, $10,000.

★Colo., Trindad—City let contract building trunk sewer line and sewage disposal plant to Allen & Murphy, Denver, $39,485. Noted Aug. 6.

★Cal., Corcoran—See "Streets and Roads."

Cal., Los Angeles—City received low bid building vitr. pipe sanitary sewer portion Buchanan Ave. from M. Chutuk, 1516 Pleasant Ave., $35,009.

★Cal., Oakland—Bd. Co. Comrs. let contract sewage disposal plant at tuberculosis hospital, Livermore, to M. E. Fernandez, Prospect St., Hayward, $16,324.

★Ont., Romey Twp.—Twp. let contract for tile sewer drain No. 4 to C. Van Slandbrock, Blenheim, $13,964.

STRUCTURAL STEEL WORK

Proposed Work

Ala., Mobile—See "Industrial Works."

O., Cleveland—See "Industrial Works."

Neb., Omaha—See "Buildings."

Idaho, Boise—See "Bridges."

Cal., Santa Ana—See "Bridges."

Que., Cedars—See "Industrial Works."

BIDS DESIRED

Tex., Barstow — See "Excavation and Dredging."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Wash., Otis Orchards—See "Bridges."

★N. B., Florenceville—See "Bridges."

REINFORCED CONCRETE

Proposed Work

N. J., Kearney—(Arlington P. O.)—See "Industrial Works."

N. J., Newark—See "Industrial Works."

Pa., Williamsport—See "Bridges."

Ala., Mobile—See "Industrial Works."

O., Cincinnati—See "Industrial Works."

O., Cleveland—See "Industrial Works."

O., Kent—See "Industrial Works."

Ia., Davenport—See "Buildings."

Minn., Minneapolis—See "Bridges."

Neb., Omaha—See "Buildings."

Mont., Anaconda—See "Buildings."

Tex., Austin—See "Water-Works."

Tex., Corpus Christi—See "Miscellaneous."

Oregon—See "Bridges."

Que., Cedar—See "Industrial Works."

BIDS DESIRED

N. Y., Tonawanda—See "Water-Works."

Va., Norfolk—See "Buildings."

O., Akron—See "Bridges."

O., Columbus—See "Bridges."

Ill., Rockford—See "Bridges."

Ill., St. Joseph—See "Bridges."

Wis., Wausau—See "Bridges."

Tex., Barstow—See "Excavation and Dredging."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ala., Albany—See "Buildings."

★Mich., Flat Rock—See "Bridges."

★Ill., Kankakee—See "Bridges."

★Wis., Racine—See "Industrial Works."

★Mo., Herculaneum—See "Miscellaneous."

★Mo., St. Louis—See "Bridges."

★Ark., Ft. Smith—See "Bridges."

★Wash., Spokane—See "Buildings."

California—See "Bridges."

★Cal., Sacramento—See "Bridges."

★Que., St. Gerard de Magella—See "Bridges."

★Ont., Fort William—See "Industrial Works."

BRIDGES

Proposed Work

Pa., New Castle — (Official) — Lawrence Co. and Mahoning & Shenango Ry. rejected bids building bridge over Neshahannock Creek, as too high. About $66,000. R. T. Sullivan, ch. engr. ry. Noted Aug. 16.

Pa., Williamsport—Bd. Comrs. Lycoming Co. rejected bids building rein.-con. bridges over Susquehanna River at Duboistown and Montgomery, as too high. Noted Aug. 16.

W. Va., Fairmont—City having plans prepared by Concrete Steel Eng. Co., 21 Park Row, New York City, for new bridge over Monongahela River.

S. C., Charleston — See "Streets and Roads."

Ala., Bay Minette — See "Streets and Roads."

Ala., Carrollton—Picken Co. plans to build 2000-ft. concrete and wood bridges. G. E. Hauser, Columbus, Miss., engr.

Wis., Green Bay — See "Streets and Roads."

Wis., Milwaukee—City and Milwaukee Co. plan to spend $20,000 to improve Humboldt Ave. bridge over Milwaukee River.

Minn., Minneapolis—Hennepin and Dacoto Cos. plan to sell $425,000 bonds, Oct. 8, to build 800-ft. bridge over Minnesota River at Lynndale Ave.; also improving 7.5 mi. roadway on Hennepin Co. side and 10 mi. Dakota Co. side. Dakota Co. to appropriate $22,500 toward cost. Tolz Engr. Co., 1410 Pioneer Bldg., St. Paul, engrs., preparing plans.

Minn., Minneapolis—City preparing plans for 158-ft. rein.-con. bridge over Lake Nokomis. About $54,000. F. W. Cappelin, city engr.

Mont., Great Falls—Cascade Co. Comrs. plan to build bridges over Missouri River on 9th and 1st Sts., N. About $185,000 and $248,000 respectively. Bridges to be built under supervision of State Highway Dept. G. R. Metlen, state bridge engr.

Mont., Ravalli—City plans to build 75-ft. bridge over Jocko River.

Mo., Platte City — See "Streets and Roads."

Mo., St. Louis—See "Miscellaneous."

Tex., Orange—City Council plans to build toll bridge over Neches River on Orange Co. Rd. About $200,000.

Okla., Ada—(Officials)—See "Streets and Roads."

Okla., Durant—City plans to build bridge over Blue River.

Okla., Holdenville — See "Streets and Roads."

Idaho, Boise—State Highway Comn. soon receives bids building Hanson steel bridge over Snake River, 771.7 ft. long, 16-ft. road way.

Wash., Olympia — (Official) — City received no bids building 370 ft. 4-arch rein.-con. bridge over Des Chutes River, 28-ft. roadway, 25-ft. walks. About $100,000. Noted Aug. 23.

Bridges (Continued)

Wash., Tacoma—City preparing plans building viaduct over Chicago, Milwaukee & Puget Sound Ry. Co. shops and yards. W. C. Raleigh, city engr.

Oregon—State Highway Comn., Salem, will soon let contract 120-ft. rein.-con. bridge over Beaver Creek, Beaver, Tillamook Co.; 126-ft. Howe truss bridge over Big Applegate Creek, Jackson Co.

Cal., Santa Ana — City retained E. T. Flaherty, engr., Los Angeles, to prepare plans for new Main St. bridge, 4 40-ft. steel spans, cost, $39,200 with sidewalks, $38,200 without sidewalks; also for Hannah St. bridge over Santiago Creek.

Cal., Willows—Glenn and Colusa Cos. plan election to vote on bonds to build bridge over Sacramento River.

B. C., Victoria—Canadian Pacific R.R. asked Bd. Ry. Comrs. to approve plans for bridge over Harbor. About $30,000. W. E. Woodhouse, Montreal, ch. engr.

BIDS DESIRED

N. Y., Thiells—See "Buildings."

N. J., Jersey City—Until Sept. 27, by Bd. Freeholders Hudson Co., improving 14th St. viaduct. Noted June 28.

Ky., Paducah—(Official)—Until Sept. 18, by G. G. Singleton, co. clk., building bridge, 4 80-ft. steel spans, concrete substructure and floors. R. H. Young, engr.

O., Akron—(Official)—Until Sept. 28, by M. Rebel, clk. Summit Co., for North Hill viaduct, rein.-con. Advertised in this issue.

Ill., Rockford—(Official)—Until Sept. 20, by Winnebago Co., building 7 rein.-con. bridges involving 138.7 cu.yd. concrete, 11,218 lb. steel.

Ill., St. Joseph—(Official)—Until Sept. 21, by G. C. Fairclo, co. supt. highways, building 110-ft. steel bridge, rein.-con. abutments, involving 127 cu.yd. concrete, 6500 lb. steel. Cost, $11,000. Noted Aug. 30.

Wis., Wausau—(Official)—Until Sept. 19, by city building 200 ft. rein.-con. bridge over Wisconsin River, 60 ft. wide. B. C. Gowden, city engr. Noted Aug. 30.

Ia., Mason City—Until Sept. 17, by Cerro Gordo Co., building 100-ft. pony truss bridge. R. E. Robertson, engr.

Tex., Texarkana—(Official)—Until Oct. 4, by Bd. Comrs. Red River Bridge Dist., building bridge over Red River, near Index. L. Josephus, secy.; advertised in this issue.

Okla., Eufaula — (Official) — Until Sept. 17, by J. P. Ranson, clk. McIntosh Co., building 19 bridges. About $20,000. G. W. Mitchell, co. engr.

Cal., Los Angeles—Until Sept. 24, by Los Angeles Co. Superv., building 4 180-ft. span timber highway bridges over San Gabriel River, Anaheim-Telegraph Rd., 3 180-ft. span timber bridges and 1 60-ft. Howe trusses over Rio Hondo, Valley Blvd. A M. McPherron, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Yonkers—City let contract building bridge on School St. and Nepperhan River to J. O. Weston, Radford St., $28,500.

★Pa., Phila.—Pennsylvania R.R. let contract building bridge to connect Petty's Island with Camden, N. J., to A. McMullen, 149 Bway., New York City. Noted June 14.

S. C., Camden—(Official)—Kershaw Co. received low bid building bridge from Austin Bros., 156 Greenwood Ave., Atlanta, Ga., $93,000.

★O., Cincinnati — City let contract removing Miami and Erie Canal bridge spanning waterway and building culvert in its place to E. H. Fauver & Co., 3rd and Detroit Sts., Dayton, $15,000.

★O., Lima—City let contract building bridges to Natl. Concrete Co., 825 Lemcke Bldg., Indianapolis, $27,000. Noted Aug. 23.

O., Miami—Troy Co. received low bids building concrete bridge over Stillwater River at Covington from Hanneman Bros., 1605 Kresge Blk., Detroit, $17,763; steel bridge from Rochester Bridge Co., Rochester, N. Y. $14,222; Central State Bridge Co., 606 Beech St., Indianapolis, $14,523; A. S. Fox, 50 Callahan Bank Bldg., Dayton, $14,973. Noted Aug. 16.

★Mich., Flat Rock—Pennsylvania-Detroit R.R. let contract building 3 14-ft. span rein.-con. bridge over Huron River, 2 mi. above Flat Rock, to Iliff Bros., London, O.

★Mich., Grand Rapids—See "Streets and Roads."

★Ill., Kankakee—Kankakee and Will Co. Comrs. let contract building rein.-con. arch bridge over Kankakee River to M. & P. Contr. Co., Evansville, Ind., $57,486. Noted Aug. 21.

Minn., Carver—Minneapolis & St. Louis R.R. let contract building bridge to Widell Co., Mankato, $55,000.

★Mo., St. Louis—City let contract building rein.-con. bridge over Bway. at Bellerive Park to Herclotz & Herchert, $64,496. Noted Sept. 6.

★Ark., Ft. Smith—City let contract building bridge over Arkansas River into Sequoyah Co. to H. C. Gass, 615 Beatty Bldg., Houston, Tex., $435,000. Noted June 7.

★Okla., Newkirk—Kay and Noble Cos. let contract building 480-ft. bridge over Salt Fork River to Monarch Eng. Co., Falls City, Neb., $22,000.

★Okla., Stillwater—Payne Co. let contract building bridges to Canton Bridge Co., Welden Ave., Canton, O.

Wash., Otis Orchards—King Co. Comrs. Seattle, received low bids building steel bridge over Spokane River, from Illinois Steel Bridge Co., 53 West Jackson Blvd., Chicago, $37,488 and Missouri Valley Bridge & Iron Co., Leavenworth, Kan. $39,980.

★Ore., Canyon City—City let contract replanking and improving 230-ft. bridge to Coast Bridge Co., Ry. Ex. Bldg., Portland, $12,800.

★California—State Highway Comn., 515 Forum Bldg., Sacramento, let contract building Cottonwood Creek Bridge on State Highway in Shasta Co. to Tieslau Bros., 221 Sharon Bldg., San Francisco, $28,850. Noted Sept. 6.

California — (Official) — State Highway Comn., Sacramento, received low bids building 3 rein.-con. bridges over (a) Castle Creek, (b) Mears Creek, (c) Flume Creek, on State Highway in Shasta Co., from Conners, Green & Co., Castella, (a) $9400, (b) $7900, (c) $2600; A. H. Vogt, Sharon Bldg., San Francisco, (a) $5900, (b) $5980, (c) $1,995; Tieslau Bros., San Francisco, (a) $6300, (b) $8000, (c) $2500.

★Cal., Sacramento—Sacramento and Amador Cos. let contract building rein.-con. bridges on Plymouth Rd. to F. A. Holdner, $21,291

★N. B., Cambridge—Provincial Government let contract building bridge to D. C. Burpee & Son, Gibson, $12,000.

★N. B., Florenceville—Provincial Dept. of Pub. Wks. let contract building steel bridge to The Concrete Bldrs. Ltd., Church St., Fredericton.

★Que., St. Gerard de Magella—Council let contract building rein.-con. bridge to Kiel & Renaud, St. Paul de Joliette.

STREETS AND ROADS

Proposed Work

R. I., Pawtucket—City voted $25,000 bonds to repair streets. G. A. Carpenter, city engr.

N. Y., Rochester—City Council plans to build cement sidewalks, curb and pave portion Portland St. F. T. Elwood, city engr.

N. J., Camden—City Council authorized $15,000 bond issue to improve State St. L. E. Farnham, city engr. Noted June 14.

N. J., Jersey City—Hudson Co. Blvd. Comrs. rejected bids repaving Hudson Blvd. between Paterson and Hackensack Plankroads.

N. J., Jersey City—(Official) — City Comrs. received no bids July 17, paving portion Hopkins Ave., Belgian block, and Siedler St., asphalt. C. A. Van Keuren, city engr. Noted July 12.

N. J., Newark—City plans paving Renner Ave., asphalt pavement on 6-in. concrete base, also new curb on Wright St., Ave. B, and Ave. A. M. R. Sherrard, city engr.

N. J., Passaic—Bd. Comrs. plan paving Barry Pl., asphalt-bound macadam, and widening River Dr. About $16,900. C. R. Wise, city engr.

N. J., Whitehouse — Whitehouse Twp. plans to improve roads with state aid. About $15,000.

Pa., Phila.—City Council plans to widen portion Richmond Ave. C. E. Albright, city engr.

Va., Martinsville—Henry Co. Supervs. plan to build road from Martinsville to Spray, N. C., via Ridgeway.

N. C., Hendersonville—City plans to pave 3rd Ave. and Azalia St. About $65,000. G. W. Justus, Hendersonville, engr.

N. C., High Point—City plans to issue $99,000 bonds to improve streets.

N. C., Louisburg—City plans to issue $135,000 bonds to improve streets.

N. C., Smithfield—City plans to issue $70,000 bonds to improve streets.

S. C., Charleston—Charleston Co. Comrs. plan election, Oct. 10 (change of date), to vote on $275,000 bond issue for roads and bridges. Noted Aug. 2.

S. C., Charleston—(Official)—Sanitary & Drainage Comn. plans paving 8500 yd., concrete and sheet asphalt, in Charleston Co. J. W. Martin, co. engr.

Ga., Brunswick—Glynn Co. plans election soon to vote on $240,000 bond issue for road improvements.

Ga., Montezuma—City sold $25,000 bonds to pave streets. A. Pew, Atlanta, engr. Noted May 17.

Fla., Lake City—Columbia Co. Comrs. election Sept. 25 to vote on $500,000 bond issue to build roads. Noted Aug. 30.

Fla., Miami—Dade Co. Comrs. plan to build 10 mi. hard surface road in Special Rd. and Bridge Dist. No. 3. Ben Shepard, co. clk.

Fla., Tavares — Lake Co. Comrs. plan election Sept. 25 to vote on $500,000 bond issue for highway work.

Ala., Bay Minette—Baldwin Co. Comrs. plan election Sept. 17 to vote on $75,000 bond issue for road and bridge construction.

Miss., Greenville—Washington Co. Highway Comn. rejected bids resurfacing 150-mi. permanent highway, gravel. E. W. Wood, chn. J. S. Allen, ch. engr. Noted Aug. 23.

Miss., Iuka—Tishomingo Co. voted $30,000 bonds to build Muscle Shoals Highway.

La., St. Martinsville—St. Martins Parish voted $300,000 bond issue for gravel roads throughout parish.

Tenn., Knoxville—See "Water-Works."

O., Ashland—Ashland Co. will sell $165,000 bonds Sept. 17 for road improvements. H. C. Westover, co. aud.

O., Bellaire—City Council plans to pave and improve portions Plum and 35th Sts. A. J. Norton, city engr.

O., Cincinnati—City plans election to vote on $100,000 to improve streets, $50,000 for garbage incinerator and $50,000 for parks and playgrounds.

O., Cincinnati—City Council plans to improve portion Gage St. and Ward and Hill Crest. F. Krug, city engr.

O., Cleveland—City will sell $77,400 bonds Sept. 15 to improve B'way. and Cedar Ave. R. Hoffman, city engr.

O., Cleveland—City plans to build boulevard and parkway along West 25th St. and Detroit Ave., also park between Detroit Ave. and Buckley Blvd. About $200,000. R. Hoffman, city engr.

O., Cleveland Heights — (Warrensville P. O.)—City Council plans $335,000 bond issue to pave and improve several streets. H. H. Canfield, clk.

O., Columbus—City Council authorized $15,000 bond issue to pave Naghten Ave., stone block. H. Maetzel, city engr.

O., Norwalk—Huron Co. sold $31,500 bonds to improve Bellevue-Norwalk Rd.

O., Sidney—Shelby Co. sold $51,500 bonds to improve roads.

O., Willoughby—Town plans to sell $147,500 bonds to pave several streets. C. C. Jenkins, clk.

Ind., Gary—City having plans prepared to resurface Bway., wood block or sheet asphalt, Bridge St., asphalt macadam. W. P. Cottingham, city engr.

Mich., Alma—See "Waterworks."

Mich., Alma—See "Sewers."

Mich., Flint—Genesee Co. soon lets contract building gravel roads. About $50,000.

Mich., Hastings—Bd. Rd. Comrs. Barry Co. plan to build 1-mile 9-ft. state reward gravel roadway northwest of Nashville.

Mich., Kalamazoo—Bd. Superv. Kalamazoo Co. appropriated $12,500 toward highway into Camp Custer, 1¼ mi. long, 16 ft. wide, concrete. Highway will be constructed by State Highway Dept. at cost of $25,000.

Streets and Roads (Continued)

Mich., Pontiac—Oakland Co. plans to improve and pave Springfield Pike.

Ill., Amboy—City soon lets contract 6000 sq.yd. brick pavement on Mason St. About $16,000. F. W. Leake, city engr.

Ill., Murphysboro—Jackson Co. voted $340,000 bonds to build 200 mi. hard-surfaced roads.

Ill., Rock Island—City passed ordinance to pave portions 18th, 15th, West 17th Sts. and 4th Ave. W. Treichler, city engr.

Ill., Springfield—City plans paving Woodland Ave. W. D. Seeley, city engr.

Wis., Green Bay—City plans election to vote on $175,000 bond issue for road construction. F. A. Torkelson, city engr.

Ia., Burlington—City Council plans paving South Main St. About $10,642. C. E. Waterhouse, city engr.

Ia., Minden—City plans paving Main St. from business district to Louisville and Atlantic R.R. depot.

Minn., Minneapolis—Hennepin Co. Comrs. plan to sell $427,000 bonds to pave Lyndale Ave. and construct 10-mi. hard-surfaced road to connect with Jefferson Highway at Lakeville.

Minn., Minneapolis—City plans $225,000 bond issue to widen Nicollet and Hennepin Aves. F. W. Capelin, city engr.

Kan., Beloit—Mitchell Co. plans building 14 mi. concrete road from here to Sampson. F. D. Head, co. engr.

Neb., Central City—City sold $25,000 bonds to pave streets.

Neb., Columbus—City soon lets contract constructing curb, gutters and sewers. About $23,000. Noted Sept. 6.

Mont., Butte—Silver Bow Co. Comrs. plan to pave portions South Montana St., bitulithic. About $16,493.

Mo., Greenville—Wayne Co. voted $200,000 bond issue for good roads.

Mo., Platte City—Platte Co. voted $20,000 bonds to build roads and bridges in Parkville Special Rd. Dist. Noted Aug. 23.

Mo., St. Joseph—City rejected bids paving portions King Hill Ave., sheet asphalt. New bids. Noted Aug. 16.

Mo., St. Louis—See "Miscellaneous."

Arkansas—State Highway Comn., Little Rock, plans to build 2 roads. About $135,000.

Ark., Hot Springs—Garland Co. had plans prepared for 8-mi. road, partly concrete. About $90,000.

Ark., Morrillton—Conway Co. plans to build 8-mi. road between here and Perry Co. line. About $45,000.

Tex., Dallas—Dallas Co. Comrs. soon lets contract resurfacing Richardson Rd., 5 mi., and California Rd., 2½ mi.

Tex., Houston—Harris Co. soon receives bids resurfacing 236 mi. roads. About $275,000.

Tex., Oakville—Live Oak Co. issued $70,000 bonds for road work. W. W. Caves, co. judge.

Tex., Port Lavaca—Calhoun Co. Rd. Dist. No. 2 will sell $75,000 bonds to build new roads and improve old ones. Noted Aug. 23.

Tex., San Angelo—Tom Green Co. Comrs. plan $250,000 bond issue to improve roads.

Okla., Ada—(Official)—City defeated $523,000 bond issue to pave streets and build bridges. Noted Aug. 30.

Okla., Holdenville—Hughes Co. plans $34,000 bond issue to build roads and bridges in Wattunka Twp.

Okla., Oklahoma—Bd. Comrs. plan improving portion 14th, 13th and 11th Sts. and Park Pl. G. V. McClure, city engr.

Idaho, American Falls—Comrs. of Highway Dist. No. 1 Power Co., plan to gravel 10-mi. main highways. About $1000 to $1500 per mi.

Idaho, Boise—Council passed resolution creating Paving Dist. No. 24, involving paving State St., $13,000. C. C. Stevenson, city engr.

Utah, Prove—Utah Co. Comrs. plan 2 sections hard-surface road, about 3½ mi., between American Fork and Pleasant Grove, and 1 on Payson Hill. Noted Aug. 30.

Ariz., Phoenix—Council passed ordinance for paving Monroe, Filmore and McKinley Sts. J. B. Girard, city engr.

Wash., Everett—Snohomish Co. soon lets contract building highway from Lowell to Snohomish, about 4 mi., and from Forbes school toward Swan Trail Rd.

Ore., Albany—Linn Co. soon lets contract paving Albany-Jefferson Rd.

Ore., Warrenton—City plans election soon to vote on $45 000 bond issue for paving and improving Beach Rd.

Cal., Hanford—B. Duffield, King Co. surv. preparing plans for 6½-mi. highway.

Cal., Los Angeles—City Council plans to improve portions Ancon, 2nd and Diamond Sts. A. C. Hensen, city engr.

Cal., Stockton—San Joachim Co. plans to improve 5 mi. Borden Rd. F. E. Quail, co. surv.

Calif., Taft—City rejected bids paving, curbs and sidewalks. New bids. Noted Aug. 30.

BIDS DESIRED

N. Y., Newburgh—(Official)—Until Sept. 24, by H. Wilson, city mgr., paving and curbing Liberty St. Advertised in this issue.

New Jersey—Until Sept. 25, by State Highway Comn., Trenton, paving Nichols Ave., New Brunswick, 4000 sq.yds. surface pavement, concrete. A. Atkinson, New Brunswick, engr.

N. J., Newark—Until Oct. 15, by City, paving Vanderpool St. M. R. Sherrard, city engr.

Fla., Miami—Until Sept. 20, by City Council, paving, grading, curbing and guttering involving 24,325 lin.ft. curb, 35,040 lin.ft. gutter, 37,433 cu.yd. grading, 186,164 sq.yd. paving and 115,090 gal. road oil. W. B. Moore, city clk.

Ala., Oneonta—Until Oct. 11, by Blount Co. Comrs. grading and draining portions Huntsville Rd., 5.3 mi., including 16,862 cu.yd. excava., 50 cu.yd. rock excava., and 5 acres clearing and grubbing.

La., New Orleans—(Official)—Until Sept. 25, by W. J. Hardee, city engr., paving, installing sub-surface drains, curbs, gutter bottoms, etc., on several streets.

O., Bowling Green—(Official)—Until Oct. 6, by J. E. Shatzel, secy. bd. trustees, Bowling Green State Normal College, 3500 sq.yd. paving, 10,000 sq.yd. concrete walk, and grading. L. Brandt, 1900 Euclid Ave., Cleveland, engr.

O., Cincinnati—Until Sept. 20, by Bd. Pub. Serv., improving portion Madison Rd., wood block, paving gutters, brick and balance of roadway with bitulithic, setting granite curbs and constructing necessary addition to water mains. Noted July 26.

Indiana—By Co. Comrs. building roads as follows: Sept. 21: Columbus; 11,074 ft. and 11,294 ft. gravel roads, Flatrock and German Twps. W. H. Scott, aud. Sept. 25: Anderson; 2 rocmac roads, Monroe Twp. E. T. Flahavin, aud.

Ill., Frankfort Heights—(Official)—Until Sept. 17, by City, building 20,000 sq.yd. 6-in. concrete paving. P. B. Wilson, Marion, engr.

Ill., Paris—Until Sept. 17, by Comr. Highways, Hunter Twp., Edgar Co., constructing 3000 lin.ft. gravel road on Heelan Rd. and 3000 lin.ft. gravel on Baldwinsville-State Line Rd.

Ill., West Frankfort—(Official)—Until Sept. 17, by City, for 246.400 sq.yd. 4½-in. 1-course concrete sidewalk. Putman & Moutz, Benton, engrs.

Wis., Racine—Until Sept. 22, by Bd. Pub. Wks., paving 12.090 sq.yd. sheet asphalt, 5126 lin.ft. cement curb and gutter and 4050 lin.ft. concrete curbstone. P. H. Connolly, city engr.

Ia., Seymour—Until Sept. 24, by J. W. Lowry, city clk., building sidewalks, street crossings and alley crossings.

Okla., Newkirk—(Official)—Until Sept. 30, by City, paving, grading and curbing portion of business section. About $65,000. G. P. Endicott, city engr. Noted Aug. 30.

Utah, Salt Lake City—Until Sept. 27, by City grading, guttering, curbing, sidewalks and paving on Gilmer Dr., Paving Extension No. 138 and Sidewalk Extension No. 190. S. Q. Cannon, city engr.

Wash., Everett—Until Sept. 17, by M. Weatherbee, aud. Snohomish Co., building Permanent Highways Nos. 32 and 33.

Cal., Riverside—Until Sept. 19, by Bd. Superv. Riverside Co., improving Yorba St., Corona, involving 750 cu.yd. excava., 2289 lin.ft. shaping roadbed and 568 cu.yd. concrete paving. A. B. Pilch, co. clk.

Cal., San Bernardino—Until Sept. 17, by City Clk., improving South Arrow Head Ave., asphaltic oil wearing surface on 4-in. concrete base. F. Smith, city engr.

Cal., South Pasadena—Until Sept. 17, by V. B. Garwood, city clk., paving Fremont Ave., concrete, 216,000 ft.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Maine—(Official)—State Highway Comn., Augusta, let contract 4.47-mi. road in Auburne to Ames D. Bridges Sons, Inc., Hazardville, Conn., $68,923.

★Mass., Boston—City let contract paving various streets in East Boston, Charlestown, Brighton and Dorchester, sheet asphalt, topeka, bitulithic and filbertine, to Bermudez Co., 246 1st St., Cambridge. About $223,446.

★Conn., New Haven—City let contract paving Adeling and Tenman Sts. and Ellisworth Ave., bituminous macadam, Oak and Spring Sts., Davenport and Whaley Aves., sheet asphalt, to C. W. Blakesless & Sons, 58 Waverly St., $99,782; Sachem and Ashmun Sts., national paving, to Franklin Contr. Co., 52 Vanderbilt Ave., New York City, $36,998; Grove St. to Union Paving Co., 119 Lafayette St., Schenectady, N. Y., $15,148; Livingston and Autumn Sts., bituminous macadam to R. D. Daly, 6 Church St., $17,944.

N. Y., Yonkers—City received low bid paving portions South B'way., asphalt block, from J. Kearns, 50 Church St., New York City, $60,749.

★N. J., Collingswood—(Official)—Borough let contract resurfacing and improving streets to Collingswood Home Constr. Co., Collingswood. About $27,000. Noted June 28.

★N. J., Freehold—Bd. Freeholders Monmouth Co., let contract building Freehold-Smithburg Rd. to Fireproof Realty and Constr. Co., 55 Magnolia St., Jersey City, $36.024; Tennet-Englishtown Rd. to W. H. Flitcroft, Farmingdale, $9664; Holmdel Rd. to C. E. Bird, Red Bank, $16,340. Noted Aug. 30.

★N. J., Hackensack—Bergen Co. let contract building Closter Dock Rd. to Traverire & Johnson, Main St., Closter.

★N. J., Jersey City—Hudson Co. Blvd. Comrs. let contract resurfacing Hudson Blvd., Bayonne, to C. T. Cavanaugh, 34 West 55th St., Bayonne, $12,000. Noted Aug. 30.

★N. J., Linden—Boro. Council let contract paving Elizabeth Ave., concrete, to C. H. Winans, Rahway. About $14,878. Noted Aug. 30.

★N. J., Newark—City let contract paving Woodland Ave. to Chapman & Lawrence, Newark. About $22,752.

★N. J., Newark—Bd. Pub. Wks. let contract improving Paterson-Hamburg turnpike to Heyman & Goodman, 256 B'way., New York City. Noted Sept. 6.

★N. J., New Brunswick—(Official)—City let contract paving Remsen Ave. and Comstock, Brown, Townsend and Condict Sts. to T. H. Riddle, 102 Church St., $42,500. Noted Aug. 16.

★N. J., Paterson—(Official)—Bd. Freeholders let contract paving Midvale-Greenwood Lake Rd. in Passaic Co. to Keefe & Scheuermann, R. F. D. No. 1, Paterson. About $19,486. Noted Aug. 30.

★Pa., Uniontown—(Official)—Fayette Co. let contract grading River Rd., Brownsville, to Austin & Matthews, Connelsville, $17,100. Noted Aug. 9.

★Ala., Abbeville—Henry Co. let contract grading, draining and surfacing 6 mi. state-aid road to W. B. Crawley & Co., Walker Springs.

★Ala., Birmingham—City let contract paving 2nd Ave. to Sullivan, Long & Haggerty, Bessemer, $13,000.

★Louisiana—State Highway Comn., New Orleans, let contract building 4 mi. road from Alexandria to Camp Beauregard to A. R. Young & Co., New Orleans. About $78,275. Noted Aug. 23.

★Ky., Ludlow—City let contract paving portions Ludlow Highway, bitulithic, also concrete curbs, to Henkel & Sullivan, 17 Mercantile Library Bldg., Cincinnati, $42,320.

Streets and Roads (Continued)

Ohio—State Highway Comn., Columbus, received low bids Sept. 7, building roads and bridges as follows: Adams Co., Sect. B, West Union-Hillsboro Rd., grading and paving with water-bound macadam and constructing bridges and culverts; Dalton & Dalton, Winchester, $9211; Sect. C-2, West Union-Sinking Springs Rd., grading, paving with water-bound macadam and constructing culverts; J. M. Day & Co., Peebles, $8500; Butler Co., Sect. I, Hamilton-Middletown Rd., constructing bridges and culverts, grading roadway and paving with either monolithic brick or rein.-con., monolithic brick, T. J. Connell, Cambridge City, Ind., $76,964; rein.-con., Stroudbeck Bros., Middletown, $67,984; Sect. J, monolithic brick, T. J. Connell, Cambridge City, Ind., $81,874; Delaware Co., Sect. A, Delaware-Prospect Rd., bridges and culverts, grading roadway and paving, rein.-con., J. T. Irwin, Sandusky, $59,499; O'Bryant & Gregg, Marysville, $58,682; Delaware Blue Limestone Co., Delaware, $56,702; bituminous concrete, Federal Asphalt Paving Co., Hamilton, $63,700; Green Co., Sect. I, Wilmington-Xenia Rd., bridges and culverts, grading roadway and paving with water-bound macadam, Wilson Eng. & Constr. Co., Xenia, $55,587; Hancock Co., Sect. A-1, Ottawa-Findlay Rd., grading roadway, constructing bridges and culverts and paving, brick, W. E. Dorsey, Findlay, $37,388; asphalt concrete, $31,498.67; C. G. Witham, Deshler, $36,500; Johnson Constr. Co., Chicago, Ill., $31,045; Gray Bros., Bowling Green, $31,494; Highland Co., Sect. H, Allensburg-Lynchburg Rd., grading, paving with water-bound macadam and building culverts; C. A. Lunsford, Hillsboro, $11,643; Mahoning Co., Sect. R-1, Akron-Youngstown Rd., grading roadway, constructing culverts and bridges and paving with water-bound macadam; L. H. Young Constr. Co., West Austintown, $12,054; Sect. P, grading roadway and paving with brick; Smith Constr. Co., Youngstown, $26,014; James McCarron & Son, Youngstown, $25,551; L. H. Young Co., $25,483; Mercer Co., Sect. E-1, Fort Recovery-Minister Rd., grading roadway, constructing bridges and culverts and paving with concrete, Burnett & Christian, Rockford, $30,069; Monroe Co., Sect. N, Ohio River Rd., grading and constructing drainage structure, Coshocton Construction Co., $15,161; V. Mango & Co., Niles, $12,100; Muskingum Co., Sect. L, Zanesville-Cincinnati Rd., grading, constructing drainage structure and paving with bituminous bound macadam J. A. Swingle Co., Zanesville, $15,182; Pickaway Co., Sect. L-1, Lancaster-Circleville Northern Rd., grading roadway, constructing bridges and culverts and paving with water-bound macadam, W. E. Justice, Circleville, $24,050; J. S. Neff, Circleville, $22,099; Carey & McElroy, Ada., $23,722; Portage Co., Sect. V, Akron-Youngstown Rd., grading roadway, constructing bridges and culverts and paving with either bituminous macadam, concrete or monolithic brick, L. Garrett, Kent, concrete, $46,841; monolithic brick, $59,640; Preble Co., Sect. C-2, Hamilton-Eaton Rd., grading, paving with bituminous macadam and constructing culverts, H. W. Curry Co., Eaton, $8137; Hamilton & Bunger, Eldorado, $8069; Ross Co., Sect. N and O, Chillicothe-Lancaster Rd., grading roadway, constructing bridges and culverts and paving with monolithic brick, Brewer, Tomilson & Brewer, Chillicothe, Contract No. 1, $15,633; No. 2, $28,538; Shelby Co., Sect. B-1, Piqua-St. Marys Rd., grading roadway, constructing bridges and culverts and paving with either brick, monolithic brick or rein.-con., Paul, Bower & Elsass, Botkins, $23,821; Putnam & Shindledecker, Van Wert, $23,193; Stark Co., Sect. G, Ravenna-Louisville Rd. grading roadway, constructing bridges and culverts and paving with either bituminous macadam, limestone top course or bituminous macadam, slag top course; Seiple & Wolfe Co., Youngstown, $54,335; Union Co., Sect. B, Marysville-Kenton Rd., grading roadway, constructing bridges and culverts and paving with water-bound macadam, Welsh & Jones, Marysville, $33,777; D. Allen, Findlay $33,674; S. Baughman, Marysville, $33,506; Allen Co., Sect. D, Lima-Sandusky Rd., grading roadway, constructing bridges and culverts and paving with water-bound macadam, C. G. Witham, Deshler, $27,999; W. G. Mustard, Ada, $27,867; C. L. Smith, Leipsic, $25,215; Scioto Co., Sect. A-1, Jackson-Portsmouth Rd., constructing bridges and culverts, grading and paving with brick on concrete foundation, Kelly Bros., Portsmouth, $25,021; Sheridan-Kirk Co., Portsmouth, $25,022.

O., Cincinnati—(Official)—City received low bids paving portion Maple Leaf Ave. from Kirchner Constr. Co., 221 West 9th St., $20,548. Noted Aug. 30.

★**O., Cleveland**—Bd. Control let contract paving portions East 125th, 127th, Hulda and Marshall Sts., to Baldwin Bros., 560 Rose Bldg., $42,782; Jefferson Rd. to Rieley Bros., 348 Arcade, $14,234; Sauer Ave. to Cleveland Trinidad Paving Co., Arcade, $11,437. Noted Aug. 23.

O., Columbus—City received low bid paving East Naghten St., from Trinidad Asphalt Paving Co., Guaranty Trust Bldg., St. Louis, $25,273.

★**O., Lakewood**—City let contract paving to Cleveland Trinidad Paving Co., 3409 Trumball St., Cleveland, as follows: Atkins Ave., $9,958; Franklin Ave., $18,039; Merle Ave., $13,438; Lark Ave., $14,924; Kenilworth Ave., $6849; Franklin Ave., $2652; Jackson Ave., $12,218; Thrush St., $11,045.

★**O., Mt. Vernon**—See "Sewers."

★**Indiana**—(Official)—Co. Comrs. let contract building road as follows: Indianapolis, improving road Warren Twp., to Hutton & Harris Constr. Co., Milford, $39,759. Madison, bituminous concrete road, Anderson Twp., Indiana Asphalt Paving Co., Indianapolis, $72,400. Valparaiso, road Center Twp., R. Damass Chisterton, $10,775. Portland, crushed stone road, Wabash Twp., L. P. Fenning, New Corydon, $8676. Rochester, 2 roads, Henry Twp., T. Johnson and D. B. Clevenger, $7875 and $11,800 respectively. Plymouth, Boggs Rd., Walnut Twp., H. L. Short, Lakeville, $5260. Logansport, gravel roads, Bethlehem Twp., O. E. Shafer, Royal Center, $1527. Jefferson, macadam road, Washington Twp., C. W. Dowdle, R. R. Jeffersonville, $4250. Greenfield, William Merlau et al., Rd., D. H. Fatout, Indianapolis, $11,499. Noted Aug. 23.

★**Ind., Leesburg**—City let contract brick paving to Grossnickle Constr. Co., Leesburg, $35,402.

★**Mich., Detroit**—City let contracts grading and paving with asphaltic concrete as follows: Detroit Asphalt Paving Co., McGraw Bldg., Hurlburt Ave., $29,097, Maplewood Ave., $17,773, Hurlburt Ave., $17,778, Cleveland St., $17,755, Waterloo Pl., $4768, Garfield Ave., $10,809, Manistique Ave., $27,103, Central Ave., $16,976, Vinewood Ave., $16,921, Bruckner Ave., $9586, Graham Ave., $8630, Harfield Ave., $7236, Hammond Ave., $6572, Burrel Pl., $5045; Cleveland Trinidad Paving Co., 3409 Trumbull St., Cleveland, Glendale Ave., $15,149, Guilloz St., $14,428, La Belle Ave., $12,318, Cortland Ave., $12,292, Oakman Blvd., $46,050, Blaine Ave., $18,886; J. A. Mercier, 216 Hammond Bldg., Conant Ave., creosoted blocks on 8-in. concrete foundation, Medina curb, $31,785.

★**Mich., Grand Rapids**—Kent Co. let contract 2-mi. concrete road including grading, culverts, and 2 concrete bridges in Plainfield and Alpine Twps. to Terbeek & Bronkhorst, Holland. About $31,994.

★**Mich., Holland** — Town let contract building 1st 9-ft. concrete highway portions Beechwood Rd. to C. Shaap, Zeeland.

★**Illinois**—State Highway Comn., Springfield, let contract paving in Pike Co., Sect. C, waterbound macadam, to Buil & Olson, 1722 Lafayette St., St. Joseph, Mo., $14,438; Cook Co., Sect. I, concrete, to Russell & Ashdown Co., Chicago Heights, $10,453; Sect. S, concrete, Chicago Heights Coal Co., Chicago Heights, $10,744.

★**Ill., Danville**—(Official)—City let contract paving Chester Ave. to Clarke Constr. Co., Danville, $13,238.

★**Ill., Rock Island**—City let contract paving grading and curbing portion 24th St., brick, to McCarthy Improv. Co., 3rd and Perry Sts., Davenport, $2.30, 40c. and 50c. respectively.

★**Wis., Beloit**—(Official)—City let contract improving Park and Porter Aves. to G. Welch, Beloit, $45,126. Noted July 5.

★**Wis., Clintonville** — City let contract paving several streets to Garvey & Weyenberg, Appleton. About $16,000.

★**Wis., Eau Claire**—City let contract paving portion Wisconsin St. to Cast Stone Constr. Co., Eau Claire, $1.48 per sq.yd.

Wis., Milwaukee—City received low bids resurfacing 11,000 sq.yd. National Ave., (a) asphalt with binder, (b) binder, (c) without binder, (d) concrete covering, from Western Constr. Co., (a) $1.68, (c) $1.47; White Constr. Co., 1600 Ry. Ex. Bldg., (b) $1.57; Badger Constr. Co., 601 3rd St., Milwaukee, $1.60; C. J. Moritz, (d) $1.34; Kroening Constr. Co., 708 Majestic Bldg., (d) $1.34; Miner Constr. Co., (d) $1.10.

★**Ia., Laurens**—City let contract paving streets to Bryant Paving Co., Waterloo, $45,000.

★**Minn., Gilbert**—St. Louis Co. let contract rolling and surfacing 1-in. Eveleth Rd to General Contg. Co., 1254 Plymouth Bldg., Minneapolis. About $20,000.

★**Mont., Judith Gap**—City let contract laying sidewalks to J. A. Gudgel Co., Kalispell, $19,955.

★**Mo., Excelsior Springs**—City let contract paving (a) Temple Ave., brick, (b) Dunbar Ave., tarvia, to Young Bros. Constr. Co., North Kansas City, (a) $2.24, (b) 80c.

★**Mo., Lexington**—Lafayette Co. let contract resurfacing 6 mi. macadam road to Albert Hood, Independence. About $20,000.

★**Mo., St. Louis**—Bd. Pub. Wks. let contract paving portion 22nd St., concrete, Missouri Ave. and Penn St., brick, grading 5th Ave. to Land Constr. Co., Ballinger Bldg., oiling portion 17th St. to Skilbred Constr. Co.; Felix St. to Metropolitan Paving Co., 7th and Olive Sts.

★**Ark., Little Rock**—City let contract paving Main, 12th and Maple Sts., Improv. Dist. No. 18 to Norton Constr. Co.

★**Ark., Nashville**—City let contract macadamizing Main St. to Hardin Constr. Co., Hot Springs, $10,000.

★**Tex., Austin**—Travis Co. let contract regraveling Manor Rd., 6 mi., to Baker Bros. & Canion, Austin, $27,000.

★**Tex., Beaumont**—City let contract resurfacing several streets to Uvalde Rock Asphalt Co., Beaumont. About $52,000 to $53,000. Noted Aug. 23.

★**Tex., Houston**—City let contract paving North Main St. to A. M. Chambers Transfer Co., 518 Walnut St. About $17,050.

★**Tex., Vernon**—City let contract paving 1 mi. West Wilbarger St., asphaltic concrete, to General Constr. Co., 506 Farmers and Merchants Bank Bldg., Fort Worth. About $30,000. Noted July 12.

★**Okla., Tecumseh** — Pottawatomic Co. Comrs. let contract building 10-mi. road to C. A. Landon, 225½ West Grand Ave., Oklahoma. About $17,250. Noted Aug. 23.

★**Colorado**—State Highway Comn., Denver, let contract grading and paving 4-mi. road to W. A. Kelly, 822 Gunter Bldg., San Antonio. About $32,000. Noted July 5.

★**Utah, Ogden**—City let contract paving in Dist. No. 126 to P. J. Moran, 52 West 2nd St., Salt Lake City, $26,373.

★**Wash., Vancouver**—Clarke Co. Comrs. let contract building Permanent Highway No. 1-A to United Contr. Co., Northwest Bank Bldg., Portland, as follows: 1st 73 stations, bitulithic, 4-in. concrete base, $26,678; stations 105 plus 60, concrete, $38,486; 73 stations, $24,112; station 105 plus 60, $34,919. Noted Aug. 23.

★**Oregon**—State Highway Comn., Salem, let contracts highway work as follows: Warren Constr. Co., Journal Bldg., Portland, Columbia River Highway from Astoria to Svenson, 14 mi., and from Westport to Svenson, 15½ mi., macadam, $84,737 from Multnomah Co. line to Scappoose, 2¾ mi., bitulithic, $36,678, John Day Highway, Wheeler Co., rock macadam, $15,714; Clark & Flippin, The Dalles, Columbia River Highway from Clatsop Co. line to Globe, 17¾ mi., macadam, $109,891; Oskar Huber, Sherlock Bldg., Portland, Coast Highway, Tillamook Co., 5 mi. grading and paving, bitulithic, $110,645.

★**Ore., Myrtle Point**—City let contract paving 4 street-improvement districts to Dean & Brown. About $10,471. Noted Aug. 23.

★**California**—(Official)—State Highway Comn., Sacramento, let following paving contracts: Contra Costa Co., between Hercules and Eckley, Div. 4, Route 14, Sect. B, to Whitlock & Gorrill, 2709 Parker St., Berkeley; Los Angeles Co., between Castaic School and Kay Ranch, Div. 7, Route 4, Sect. B, to Brashear-Burns Co., Hollywood, R. F. D. 10, Box 90, Los Angeles; Shasta Co., between Sacramento River and Lamoine, Div. 2, Route 3, Sect. C, to J. F. Fitzpatrick, 2625 P St., Sacramento. Noted Aug. 16.

★**Cal., Auburn**—City let contract paving Main St., concrete, to Flinn & Treacy, First Natl. Bank Bldg., San Francisco, $17,100. Noted Aug. 23.

Streets and Roads (Continued)

★Cal., **Corcoran**—City let contract paving Whitley Ave. and installing sewerage system to Federal Constr. Co., Sharon Bldg., San Francisco, $80,426. Noted July 26.

★Cal., **Los Angeles**—City let contract improving portion Emerald St. to Johnson & Grohs, $10,000.

★Cal., **Los Angeles**—City let contract improving Franklin Ave. to Bryant & Austin, 1656 Compton Ave. About $32,785. Noted Sept. 6.

Cal., **Los Angeles**—City received low bid improving 1st St. from G. H. Oswald, 405 O. T. Johnson Bldg., about $230,000. Noted Aug. 23.

★**Cal., San Diego**—(Official)—City let contract paving 22,146 sq.yd., Sect. 2, Linda Vista Rd., to John Engebretsen, 614 5th St., $75,000. Noted Aug. 9.

★**Cal., San Francisco**—Bd. Pub. Wks. let contracts paving as follows: Raymond Ave., Flinn & Treacy, First Natl. Bank Bldg.; Leland Ave. and Donahue St., H. Cummey, Hearst Bldg.; Raymond Ave., between San Bruno Ave. and Delta St., Fay Improv. Co., Phelan Bldg.; Schwerin St., T. A. Clark, 68 Post St.; Rutland and Visitacion Aves., K. Ehrhart, 660 Market St.; Cora and Delta Sts., S. F. Johnson, Pacific Bldg., 36th Ave., Owen McHugh, Russ Bldg., $29,378.

★**Que., Chicoutimi**—Town let contract 94,000 sq.yd. macadam highway to Provincial Bldg. & Eng. Co., 83 Craig St., W., Montreal, $130,000. Noted June 21.

★**Que., Quebec**—Provincial Highway Dept. let contract building road, to Provincial Bldg. & Eng. Co., 83 Craig St., W., Montreal. Noted July 5.

★**Que., St. Alphonse de Bagotiville**—Town let contract building macadam roads to Provincial Bldg. & Eng. Co., 83 Craig St., W., Montreal, $39,000.

★**Que., St. Dominquedu Jonquires**—Town let contract building macadam highway to Provincial Bldg. & Eng. Co., 83 Craig St., W., Montreal, $40,000.

★**Que., St. Hyacinthe**—City let contract new asphalt and concrete pavements to Bernard Brault, Bank of Toronto Bldg., Maisonneuve. About $136,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

New York—New York Central R.R., New York City, applied to Pub. Ser. Comn. for permission to issue $10,000,000 bonds for improvements, etc. G. W. Kittredge, Grand Central Terminal, ch. engr.

Maryland—United Railways & Electric Co., Baltimore, plans to spend $3,000,000 to extend and improve its lines during next 4 years. T. A. Cross, 1005 Continental Bldg., Baltimore, genl. mgr.

Florida—Atlantic Coast Line R.R. purchased 40-acre site near Orlando for switching yards, etc. J. E. Willoughby, Wilmington, N. C., ch. engr.

Ohio—Mahoning & Shenango Ry. & Light Co., Youngstown, plans to issue $500,000 bonds to extend its lines. R. Montgomery, Youngstown, vice pres.

Texas—Gulf, Colorado & Santa Fe R.R., Galveston, appropriated $500,000 to improve system. F. Merritt, Galveston, ch. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Pennsylvania**—Philadelphia & Reading R.R., Phila., let contract grading Saucon Creek, near South Bethlehem, Pa., extension to freight yard north Saucon Creek and new yards south Saucon Creek, etc., to C. P. Bower, Reading.

★**Ohio**—Columbus, Delaware & Marion Electric Ry., Columbus, let contract relocating 1½ mi. interurban tracks on North High St., to B. F. Patterson, Columbus, $35,000.

★**Kansas**—Missouri, Kansas & Texas Ry. let contract extending yards at Parsons, involving handling of 275,000 cu.yd. earth to L. J. Smith Constr. Co., Kansas City, Mo.

★**Missouri**—Missouri Pacific Ry., St. Louis, let contract grading 4-mi. track from main line of central division to Ft. Logan H. Roots, also for 4 mi. track on cantonment grounds, to J. J. Ball, Little Rock, Ark. About $100,000. Track laying to be done by company's forces.

★**Oklahoma**—Osage Co. and Atchison, Topeka & Santa Fe Ry. let contract track laying, grading, bridging, surfacing, fencing and building necessary appurtenances on line from Bowden to Fairfax, Okla., to Maney Bros. & Co., 304 Empire Bldg., Oklahoma.

★**California**—Bd. Pub. Wks., San Francisco, let contract building outer tracks on Municipal Ry., Market St. above Van Ness Ave., to J. N. Smith, San Francisco, $36,960.

★**California**—Atchison, Topeka & Santa Fe R.R. let contract building 2nd track between Goffs and Bagdad Stations, to Sharp & Fellows Contr. Co., Central Bldg., Los Angeles, $1,600,000.

EXCAVATION AND DREDGING

Proposed Work

Ga., Athens—Drainage—Beaver Dam D. D. No. 1 plans to drain 1600 acres. About $35,732. C. M. Straham, Athens, engr.

Ga., Athens — Drainage — Clarke Co. organized Shoal Creek D.D. No. 2 to drain 450 acres. Will soon receive bids for 8-mi. ditch; floating dipper dredge work. About $13,179. W. D. Alexander, Charlotte, N. C., engr.

Minn., Benson—Ditch—Swift Co. rejected bids building Judicial Ditch No. 4. S. B. Goodhue, engr. Noted Aug. 23.

Minn., Glenwood—Ditch—Pope Co. rejected bids building Co. Ditch No. 15, involving 129,705 cu.yd. excava. About $14,269. Noted Aug. 16.

Minn., Marshall—Ditch—Lyon Co. receiving bids about Nov. 1 building Co. Ditch No. 2, involving 157,000 cu.yd. dry land work. E. R. Shepard, co. aud.

Minn., Morris—Dredging—Stevens Co. receiving bids in October dredging Ditch No. 2, involving 200,000 cu.yd. excavation. C. R. Wollthan, aud.

Tex., Ennis—See "Miscellaneous."

Utah, Enterprise — Enterprise Reservoir & Canal Co. having plans prepared by L. M. Winsor, engr., for irrigation system, dam and reservoir.

Ore., Talent—Irrigation—Talent Irrigation Dist., Jackson Co., voted $600,000 bonds to build irrigation dist.

Cal., Newport Beach—See "Miscellaneous."

Cal., Orland — Ditch — Glenn Co. voted $220,000 bonds for lining 70-mi. ditches with concrete, Orland project.

Cal., Susanville — Canals — Long Valley Irrigation Dist., Lassen Co., preparing plans for building canals to irrigate 28,000 acres. C. E. Grunsky, engr.

B. C., Revelstoke—Dredging—See "Miscellaneous."

Ont., Port Arthur—Dredging—Dominion Government appropriated $130,000 for dredging new Saskatchewan Co-operative and Richardson elevators on north waterfront.

BIDS DESIRED

N. Y., Albany—(Official)—Until Oct. 9, by W. W. Wotherspoon, supt. pub. wks., improving New York State Canals; advertised in this issue.

Ga., Statham—Drainage—Until Sept. 15, by T. J. Sikes, chn. Barbers Creek D.D., Barrow Co., 10-mi. open ditch involving 211,000 cu.yd. excava. W. D. Alexander, Charlotte, N. C., engr.

Ind., Rensselaer—Ditch—Until Sept. 20, by C. J. Hobbs, comr., building Guy Barnard, et al. Ditch, Cause 136, main ditch, 110,400 ft. long, involving 997,452 cu.yd. excavation.

Ill., Lewiston—Drainage—Until Sept. 24, by West Matanzas Drainage & Levee Dist., Fulton Co., laying 7200 ft. 8-in. tile, Lateral No. 1 2200 ft. 18-in. tile, Lateral No. 2; 4200 ft. 16-in. tile, Tile Ditch No. 4. J. H. Wehner, comr. Noted Aug. 30.

Ill., Wabash—(Official)—Drainage—Until Sept. 18, by Drainage Comrs. Wabash Co., repairing and excavating drainage ditches, D.D. No. 15. F. P. Bosecker, comr.

Ia., Clarion—Drain—Until Sept. 17, by F. E. Osier, aud. Wright Co., building Drain No. 172, involving 15,624 ft. 6- to 30-in. tile.

Ia., Clarion—Drain—Until Sept. 17, by F. E. Osier, aud. Wright Co., building Drain No. 167, involving 45,600 ft. 6- to 32-in. tile.

Ia., Red Oak—Ditch—Until Sept. 18, by F. Ambur, aud. Montgomery Co., building Drainage Ditch No. 1, 8.48 mi. long, involving 567,100 cu.yd. excava., Ditch No. 2, 81,140 cu.yd. excava.

Minn., Walker—Ditch—Until Oct. 1, by C. D. Bacon, aud. Cass Co., building Judicial Ditch No. 8, involving 98,925.8 cu.yd. excava., bottom width, 4- to 6-ft.; Judicial Ditch No. 9, Cass and Wadena Cos., 104,462 cu.yd excava., bottom width, 4 to 6 feet.

Minn., Willmar—Ditch—Until Oct. 15, by Kandiyohi Co., Co. Ditch No. 37, 17½ mi. long, involving 400,000 cu.yd. excavation. S. Nelson, aud.

Tex., Barstow — Irrigation — Until Sept. 24, by Ward Co. Water Improv. Dist. No. 2, building irrigation canal approximately 70,000 cu.yd. excava., 6 rein.-con. falls involving 111 yd. 1-2-4 concrete, 2564 lb. reinforcing steel with 240-yd. earth excava., 60-yd. back fill. A. H. Dunlap, Barstow, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. C., Winston-Salem**—(Official)—Forsyth Co. D.D. No. 1 let contract building drainage system involving 20-mi. canal to Siginon Reinhardt & Rutledge, Stanley, $49,100. Noted Aug. 16.

★**Mich., Saginaw**—Drain—Saginaw Co. let contract digging, cleaning out and widening Swan Creek Drain, to Woolman Constr. Co., Sandusky, Mich.

★**Ill., Cullom**—Livingston Co. let contract building D.D. No. 2, involving 18,643 ft. 8- to 30-in. tile to E. Karr, Paxton and D. G. Cooper, Gibson.

★**Ia., Boone**—Drainage—Boone Co. let contract building Drain No. 137 as follows: Tile to McHose Sand and Tile Co., Boone, $21,000; labor to A. A. Rose, Boone, $16,000.

★**Ia., Emmetsburg**—Drainage—Palo Alto Co. let contract building D.D. No. 98 involving 315,000 cu.yd. excava. and 106,180 ft. 6- to 36-in. tile to A. Eikwold, Emmetsburg and Schultz & Bieck, Clarion.

★**Minn., Breckenridge** — Ditch — Wilkin County let contract building Co. Ditch No. 30 to J. Durzenskin, Barnesville.

★**Minn., Crookston**—Ditch—Polk Co. let contract Co. Ditch No. 119 to Union Drainage Co., Crookston, $21,485.

★**Minn., New Ulm**—Ditch—Brown Co. let contract building Ditch No. 33, involving 131,220 cu.yd. excava. and 171,851 ft. 6- to 32-in. tile to F. Aufderheide, New Ulm, and Mulgrew Sons Co., Dubuque, Ia. Noted Aug. 30.

★**Minn., Owantonna**—Ditch—M. J. Parcher, aud. Steele Co., let contract building Co. Ditch No. 5, involving 84,238 cu.yd. excava. to Ideal Cement Tile Co., and Williams & Colloway, both of Owantonna. About $51,450. Noted Aug. 9.

★**Minn., Red Lake Falls**—Ditch—Red Lake Co. let contract building ditch to J. C. Parker, Bemidji, $25,242.

★**Minn., Willmar**—Ditch—Kandiyohi Co. let contract Co. Ditch No. 38 to Minnesota Constr. Co., 339 Plymouth Bldg., Minneapolis, $21,695.

★**Wyo., Worland**—Drainage — Washakie Co. let contract laying 50,000 ft. 8- to 18-in. tile, Worland Bench D.D., to Linstrom & Oren, Worland.

★**Ark., Perry**—Drainage—Perry and Conway Cos. let contract building Cypress D.D. to E. H. Hahn, 833 Saving Trust Bldg., Little Rock, $65,000.

★**Cal., Richmond** — Dredging — City let contract dredging harbor and filling in behind bulkhead to Richmond Dredging Co., Monadnock Bldg., $44,500. Noted Aug. 30.

INDUSTRIAL WORKS

Proposed Work

N. H., Portsmouth—Rockingham County Light & Power Co., 29 Pleasant St., had plans prepared by H. M. Hope, engr., 185 Devonshire St., Boston, for addition to power plant. About $150,000.

Mass., Boston—E. L. Snider, 18 Tremont St., soon receives bids 6-story brick and concrete garage, Chardon St. About $300,000. F. A. Norcross, 46 Cornhill St., archt.

N. Y., Brooklyn—Hutwelker & Briggs Co., 14 Hall St., had plans prepared by G. M. Langdon, archt., 103 Park Ave., New York City, 4-story, 62 x 100-ft. addition to cold-storage plant and packing house. About $50,000.

N. Y., Buffalo—J. Dold Packing Co., 705-55 William St., had plans prepared by Heinschein & McLaren, archts., 37 Van Buren St., Chicago, 4-story brick and stone and packing house and office building, Fillmore Ave. and William St.

N. Y., New York—Scranton Fdry. & Engine Wks., 5 Nassau St., plans $150,000 bond issue for extensions and improvements.

N. J., Kearney—(Arlington P. O.)—Ford Motor Co., Highland Park, Mich., having plans prepared 4-story, 300 x 500-ft. rein.-con. assembling plant, Newark Bay, between Passaic and Hackensack Rivers. G. Plaintiff, 1723 Bway., New York, mgr.

Industrial Works (Continued)

N. J., Newark—Crocker-Wheeler Co., 57 Elm St., plans 5-story, 100 x 200-ft. factory, rein.-con., 4th Ave. and 12th St. About $163,000.

N. J., Plainfield—W. Scott Printing Machine Co., South Ave., had plans prepared by Levering & Garrigues, archts., 552 West 23rd St., New York City, for an addition to its plant. About $100,000.

Pa., Phila.—W. Lee, 6th Ave. and Arch St., had plans prepared by Ballinger & Perrot, archts., 17th and Arch Sts., 2-story ice manufacturing plant and storage building, 10th and Callowhill Sts. About $250,000.

N. C., Navassa—Morris Fertilizer Co., 801 3rd Natl. Bank Bldg., Atlanta, having plans prepared by P. S. Gilchrist, engr., Charlotte, 3 buildings, 150 x 200-ft., 175 x 350-ft., 80 x 100-ft., mill and brick construction. About $125,000.

Ga., Atlanta — American Agricultural Chemical Co., Empire Bldg., plans 6 buildings. About $50,000. E. F. Daniel, 625 Empire Bldg., mgr.

Ala., Mobile—Gulf, Mobile & Northern Ry. plans 3 piers and warehouses, rein.-con. and steel. About $1,000,000. B. V. Wright, Laurel, Miss., ch. engr.

O., Akron—Sanitary Milk Co. receives bids about Dec. 1, 2-story, 60x110-ft. milk depot. About $85,000. Practical Eng. Co., 535 Akron Savings & Loan Bldg., archts.

O., Berea—New York Central and Cleveland, Cincinnati, Chicago & St. Louis R.R. plan large yards and buildings here. C. A. Paquette, Cincinnati, ch. engr.

O., Canal Fulton—Fulton Pitt Car & Mfg. Co., Canal Dover, increased its capital stock from $150,000 to $400,000 and will enlarge its plant.

O., Cincinnati—P. W. Drackett & Sons Co., Pickering Bldg., had plans prepared by R. E. Rostrom, archt., Pickering Bldg., for concrete chemical plant Spring Grove Ave. and Winton Pl. About $150,000.

O., Cleveland—General Electric Co., Nela Park, plans 145 x 266-ft. steel and concrete glass factory and warehouse, 1131 East 152nd St. About $160,000. G. H. Johnson, 1125 Citizens Bldg., archt.

O., Cleveland—Standard Oil Co., East Ohio Gas Bldg., soon lets contract concrete and steel printing plant at 715 Hamilton Ave. About $75,000. A. J. Watterson, East Ohio Gas Bldg., archt.

O., Columbus — Davis-Watkins Dairymen's Mfg. Co., 10 South La Salle St., Chicago, incorporated with $4,500,000 capital stock, plans large branch warehouse here.

O., Dayton—Citizens Motor Car Co., 7th and Main St., soon lets contract 2-story 75 x 170-ft. garage and salesroom. About $75,000. A. Pretzinger and E. Musselman, 1126 Riebold Bldg., archts.

O., Kent—Mason Tire & Rubber Co. had plans prepared rein.-con. factory addition. About $150,000. W. C. Owen, 1900 Euclid Ave., Cleveland, archt., soon receives bids.

O., Wellington—Security Tire & Rubber Co., Cleveland, incorporated with $1,000,000 capital, plans factory here.

Ind., Miller—International Airship Corp., Gary, plans 1-story, 100x500-ft. factory and power house near Lake Michigan. About $200,000. W. H. Pruyn, Jr., archt., 122 South Michigan Ave., Chicago, soon receives bids.

Mich., Battle Creek—W. D. Farley, 37 East Main St., B. J. Owen, 303 Post Bldg., and H. S. Kneeland 47 Orchard St., plan 2-story, 152 x 230-ft. public garage. About $100,000. W. J. Morehouse, 343 South Dearborn St., Chicago, archt.

Mich., Detroit—Leonard Storage Co., 596 Jefferson St. East Detroit, plans 5-story, 60x100-ft. brick warehouse on Woodward Ave. About $50,000. S. H. Dunford, c/o owner, archt.

Mich., Detroit—Newton Beef Co., 1057-83 14th Ave., had plans prepared by Mildner & Eisen, archts., 924 Hammond Bldg., 5-story, 165 x 380-ft. packing plant. T. E. Newton, pres.

Ill., Chicago—Fitzpatrick Bros. had plans prepared for soap factory. About $90,000. J. J. Fitzpatrick 1310 West 22nd St., pres. W. G. Uffendell, 39 South State St., archt., soon receives bids.

Ill., Chicago—Hotel La Salle Co. had plans prepared for 7-story, 80 x 180-ft. garage and storage building. J. W. Stevens, Madison and La Salle Sts., pres. Holabird & Roche, 104 South Michigan Ave., archts., soon receives bids.

Ill., Chicago—Robb Motor Co., c/o A. P. Dippold, archt., 4747 Cottage Grove Ave., plans to build public garage. About $50,000.

Ill., Chicago—Louis Schentnitz, Jackson Blvd., plans 7-story brick factory, 1032 Kingsburg St. About $150,000. J. P. Coning Eng. Co., 30 North La Salle St., engrs.

Ill., Peoria—Mackemer Motor Co., 715 Main St., plans 2-story, 100 x 150-ft. garage, 7th and Franklin Sts. About $50,000. B. L. Hulsebus, archt., 1001 Jefferson Bldg., soon receives bids.

Wis., Milwaukee—A. F. Gallun & Sons Co., 1000 North Water St., plans addition and alterations to plant. About $75,000. Brust & Philip, 506 Free Press Bldg., archts.

Wis., Milwaukee—Shafrin-Schmitz & Co., 3102 Cherry St., plans 3-story, 40x42-ft. brick and concrete warehouse. L. J. Laskin, Archt., 310 Caswell Blk., soon receives bids.

Wis., Milwaukee—Welch Investment Co., Germania Bldg., soon lets contract 5-story, 75x150-ft. rein.-con. and brick garage and service station, 704-708 Grand Ave. About $60,000. H. C. Hengels, 1st Natl. Bank Bldg., archt.

Ia., Sioux City—Armour & Co., 215 Douglas St., plans improvements to packing plant. About $500,000. J. E. O'Hern, Chicago, genl. supt.

Mont., Anaconda—Y. M. C. A. rejected bids for 2-story, 98x126-ft. rein.-con. building. About $200,000. New bids.

Okla., Oklahoma—Kansas City Wholesale Oil Co. plans oil-compounding factory here. About $100,000. J. N. Bowen, 509 Main St., Kansas City, Mo., mgr.

Que., Cedars—(Official)—Cedars Rapids Hydro-Electric Development Co. having plans prepared by Unit Constr. Co., engrs., Title Guaranty Bldg., St. Louis, Mo., 70 x 130 x 600-ft. steel and rein.-con. addition to power house.

Que., Maisonneuve — Tetrault Shoe Co., 331 Demontigny St., E., Montreal, plans factory here, brick and rein.-con. About $150,000.

Ont., Tilbury—Hessco Electric Co., 210 Adelaide St., W., plans 5-factory buildings, brick and rein.-con. About $200,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. H., Claremont**—Sullivan Machinery Co. let contract 3-story, 80 x 121-ft. rein.-con. factory, also 2 smaller additions to J. H. Mendell Eng. & Constr. Co., 208 Granite St., Manchester.

★**Mass., New Bedford**—National Spun Silk Co., Trenton, N. J., let contract 4-story silk mill to B. F. Smith Co., 22 Mason Lumber Yards, Newell Ave., Pawtucket. About $400,000.

★**Mass., New Bedford**—New Bedford Gas & Edison Light Co., Ft. Coffin St., let contract 60 x 90 ft., brick, concrete and steel addition to power plant to Stone & Webster Eng. Corp., 147 Milk St., Boston, $500,000.

★**N. Y., Flushing**—New York & Queens Electric Light & Power Co., 444 Jackson Ave., Long Island City, let contract 2-story, 94 x 103-ft. substation to J. H. Deeves & Bro., 103 Park Ave., New York City, $50,000. Noted Aug. 23.

★**N. Y., New York**—Todd Shipyard Corp., 15 Whitehall St., let contract 3-story, 100 x 150-ft. storage building, brick, 3rd Ave., near 24th St., to G. E. Tilt & Co., 90 West Bway., $72,000.

★**N. Y., S. I., New Brighton**—Tanner Gross Co., Inc., 25 Beaver St., New York City, let contract, 3-story, 112 x 120-ft. cereal mill and warehouse, to Industrial Eng. Co., 30 Church St., New York City, $125,000. Noted Aug. 30.

★**N. J., Plainfield**—W. Scott Printing Machine Co., South Ave., let contract factory, storage and office buildings to Levering & Garrigues, 552 West 23rd St., New York City, $100,000. Noted Sept. 6.

★**O., Cincinnati** — Laidlow Works of Worthington Pump & Machinery Co., 1504 1st Natl. Bank Bldg., let contract 6-story, 60 x 80-ft. addition, Elmwood Pl., and Carthage Ave., to B. Baldwin, 72 Perry Bldg., $100,000. Noted June 21.

★**O., Cleveland**—Colonial Woolen Mills Co., West 65th and Barber Sts., let contract 3-story, 80x100-ft. brick factory to H. G. Slatmeyer Constr. Co., 203 Lakeside Ave. Noted Aug. 16.

★**O., Cleveland**—Gillman Printing Co., 625 St. Clair Ave., let contract remodeling 4-story factory to H. G. Slatmeyer Constr. Co., 203 Lakeside Ave. About $65,000.

★**O., Cleveland**—E. H. Hahn, West [illegible] St., let contract 60x120-ft. brick factory to H. G. Slatmeyer Constr. Co., 203 Lakeside Ave. About $50,000.

★**O., Cleveland**—Lang Body Co., Garfield Bldg., let contract 1- and 3-story, 60 x 160-ft. concrete and steel aeroplane plant, [illegible] West 106th St. to Fath Constr. Co., 5703 Euclid Ave., $75,000.

★**O., Cleveland**—National Malleable Castings Co., let contract power house, boiler room and carpenter machine shop, Quincy Ave. and Woodmill Rd., to F. W. Mark Constr. Co., 344 Leader-News Bldg., $90,000.

★**O., Dayton**—Cooper Medicine Co., 309 East 1st St., let contract 5-story, 50 x 196-ft. factory to F. A. Requarth Co., Monument Ave. and Sears St., $175,000. Noted Sept. 6.

★**Mich., Huron**—Grand Trunk R.R., c/o J. B. Gaut, supt. constr., 112 Adams St., Chicago, let contract 1-story, 160x365-ft. freight-car repair shop to J. Stewart Co., Westminster Bldg., Chicago, $150,000.

★**Ill., Galesburg** — McCollum Bros., 75 South Chamber St., let contract 3-story, 40 x 57-ft. candy factory to Monmouth Galesburg Constr. Co., Galesburg, $60,000.

★**Wis., Milwaukee**—Globe Seamless Steel Tube Co., 37th Ave. and Burnham St., let contract 1-story, 50x500-ft. brick, steel and concrete tube shop addition to Riesen Bros. Co., 1008 1st Natl. Bank Bldg.

★**Wis., Racine**—Chicago, Racine & Milwaukee R.R. let contract 6-story, 50 x 156-ft. rein.-con. factory for dock, storage and light manufacturing purposes to G. W. Stiles Constr. Co., 209 South La Salle St., Chicago.

★**Ia., Cedar Rapids**—National Oats Co. let contract 3 warehouses and storage tanks, 6-story, brick and rein.-con., to McDonald Eng. Co., 547 Monroe St., Chicago, $1,000,000.

★**Cal., Los Angeles**—Stauffer Chemical Co., 624 California St., San Francisco, let contract 1-story, 116x240-ft. brick and concrete chemical factory, to Leonard & Peck, H. W. Hellman Bldg., Los Angeles. About $100,000.

★**Ont., Fort William**—Davidson-Smith Co., Grain Ex. Bldg., let contract 1-story, rein.-con. grain elevator to Barnett & McQueen, 203 Cuthbertson Blk. About $100,000.

★**Ont., Fort William**—N. M. Paterson Co., Grain Ex. Bldg., let contract rein.-con. grain elevator with 500,000 bu. capacity to Fegles-Bellows Co., Grain Ex. Bldg. About $200,000.

BUILDINGS

Proposed Work

Mass., Northampton—College—Smith College plans, 2-story, 45 x 80-ft. About $65,000.

Conn., Hartford—School—Bd. Educ. had plans prepared by Whiton & McMahon, archts., 36 Pearl St., 2-story addition. About $75,000. A. Mason, secy.

Conn., South Norwalk — School — Bd. Educ. having plans prepared by W. H. Beers, archts., 17 Madison Ave., New York City, 2-story 50 x 100-ft. brick and stone Flax Hill Rd. About $50,000.

N. Y., Binghamton—Freight House—Delaware, Lackawanna & Western R.R. had plans prepared, freight house, team yards, and new trackage system on Henry St., between Fayette and Liberty Sts. About $200,000. G. J. Ray, Hoboken, N. J., ch. engr.

N. Y., Buffalo—Museum—Buffalo Society of Natural Science plans 2-story. About $200,000. Green & Wicks, 110 Franklin St., archts.

N. Y., Long Island City—Theatre—Wilmer & Vincent Theater Co., 33 West 42nd St., New York City, having plans prepared by E. C. Horn & Sons, archts., 1467 Bway., New York City, 2-story 158 x 268-ft. Jackson Ave. About $160,000.

N. Y., New York—Hotel—H. C. Butler, c/o W. A. White & Sons, 46 Cedar St., had plans prepared by Ford, Butler & Oliver, archts., 101 Park Ave., for alterations to 6-story, 197 x 205-ft. brick hotel, 4th Ave. between 32nd and 33rd Sts. About $60,000.

N. Y., New York—Office—New Jersey Zinc Co., 55 Wall St., plans, 7-story, Front St. and Maiden Lane. H. J. Hardenburgh 17 West 34th St., archt.

Buildings (Continued)

N. Y., New York—Store—R. H. Macy & Co., 6th Ave., 34th and 35th St., plans 17-story addition, 149-151 West 34th and 146-148 West 35th Sts. About $500,000. R. D. Kohn, 56 West 45th St., archt.

N. Y., Rochester—Fire House—Bd. Contract & Supply, City Hall, plans brick and steel fire house on Franklin St. J. A. Crane, city clk. About $50,000.

N. Y., Syracuse—School—Bd. Educ. had plans prepared by G. Wright, archt., Union Bldg., and H. C. Allen, city engr., rebuilding Porter School. About $150,000. G. M. Fairchild, pres.

N. Y., Whitesboro — High and Grade School—Bd. Educ. plans. About $80,000. J. Edwards, pres.

N. J., Freehold—Hospital—Bd. Freeholders acquired 104 acres land and plan to build tuberculosis hospital on site to cover about 30 acres.

N. J., Jersey City—School—City Comn. appropriated $180,000 for School No. 4, 8th St. M. M. Fagan, City Hall, comr. bldgs.

N. J., Linden—School—Bd. Educ. having plans prepared by J. N. Pierson & Sons, archts., Raritan Bldg., Perth Amboy, 2 additions to School No. 2, Wood Ave. About $50,000. F. McGilvray, pres.

N. J., Paterson—School—Bd. Educ. had plans prepared, 3-story, 200x200-ft., on B'way. About $375,000. H. B. Crosby, 1st Natl. Bank Bldg., archt.

Pa., McKeesport—Club—L. O. O. M. No. 41 had plans prepared by J. A. Lohman & Sons, archts., Monesseh, 3-story, 41 x 100-ft. About $50,000.

Pa., Phila. — (Official) — Bank — Guarantee Trust & Safe Deposit Co., 421 Chestnut St., having plans prepared by Peuckert & Wunder, archts., 310 Chestnut St., 1-story, brick, stone and concrete, 9 South 52nd St.

Pa., Phila.—Office—Mellon Estate plans 8-story steel, concrete and brick, 1710-12 Market St. Sutton & Stephenson, 1317 Washington St., archts.

Pa., Phila.—Theater and Store—D. Berg, Delaware Ave. and Tasker St., had plans prepared for alterations to 4- and 6-story, 90 x 200-ft. building. About $100,000. H. J. Krapp, 114 East 16th St., New York City, archt.

Pa., Uniontown—Church and Parsonage—St. John Baptist Congregation had plans prepared, 1-story, 45 x 106-ft. About $50,000. V. Dorba, 100 Walnut St., pastor. H. C. Frank, House Bldg., Pittsburgh, archt.

Md., Baltimore — Theatre — Homewood Amusement Co., c/o G. A. Finch, 1127 Munsey Bldg., plans, 1-story, 73 x 125-ft. About $150,000. Blake & Zink, Equitable Bldg., archts.

Va., Clifton Forge—Chesapeake & Ohio R.R. Y. M. C. A. had plans prepared 2-story, 100 x 125-ft. building. About $50,000. E. D. Foster, secy. L. E. Jallade, 37 Liberty St., New York City, archt.

Ky., Covington — Schools — City election Nov. 6th, to vote on $250,000 bond issue to build schools. W. A. Shore, business director.

O., Cleveland—Hotel—Tenbusch Realty Co., 1836 Euclid Ave., plans, Euclid Ave. and 59th St. About $500,000. H. T. Jeffery, 406 Union Bldg., archt.

O., Cleveland — Jail — Cuyahoga Co. to vote, Nov. 6, on $1,250,000 bond issue to build jail.

O., Cleveland—Orphanage—Loyal Sons of Italy plans to build. About $300,000.

O., Cleveland—Store, Office and Market—E. A. Stotter, pres. Lake Erie Refining Co., 809 Leader News Bldg., had plans prepared by S. H. Weis, archt., 1032 Schofield Bldg., 2-story, terra cotta and tile, Clifton Blvd. and West 117th St. About $125,000.

O., Cleveland—Terminal — Pennsylvania R.R. plans to build in vicinity of Woodland Ave. and East 79th St. About $2,000,000 to $3,000,000. A. C. Shand, Broad St. Sta., Phila., ch. engr.

O., Cleveland—Theater—A. A. Silberberg, Cleveland, plans, 42x165-ft., at West 85th St. About $65,000. A. F. Janowitz, Permanent Bldg., archt.

O., Cleveland — Theater — Stark Amusement Co., c/o S. Silberberg, 533 The Arcade, had plans prepared, 1-story, 42 x 160-ft. moving picture theater. About $50,000. F. Janewitz, Permanent Bldg., archt.

O., Columbus—School—Bd. Educ. plans $2,000,000 bond issue for new schools and additions to old ones.

O., Dayton—Bank, Store and Office—Germania Bldg. Assn. had plans prepared, 9-story, 80 x 99-ft. C. Gohn, 207 North Lexington Ave., chn. bldg. com. Peters, Herman & Brown, 1126 Reibold Bldg., archts., will soon receive bids.

O., Norwood — High School — Bd. Educ. plans to sell $120,000 Sept. 24, to build high school. H. Ryland, clk.

Mich., Detroit—Club, Store and Apartment—Chinese Syndicate had plans prepared by Wheelock & Shank, archts., 64 Randolph St., 4-story, 125 x 200-ft. About $60,000.

Ill., Champaign—Hotel—C. F. Hamilton, Neil and Church Sts., had plans prepared. About $300,000. H. H. Richards, 327 South La Salle St., archt., will receive bids about Sept. 25.

Wis., Milwaukee — Hospital—Milwaukee Co. plans children's hospital addition to Muirdale Sanitarium. About $90,000.

Ia., Davenport—Club House—Lend-a-Hand Club had plans prepared by Clausen & Krause, archts., Central Bldg., 3-story, 120x123-ft., Main St., rein.-con. About $125,000.

Ia., Des Moines—Bath House and Pools—City having plans prepared by F. E. Wetherell, archt., 202 Youngerman Bldg. About $250,000.

Ia., Des Moines—College—Northern Iowa Baptist Assn. plans. About $1,500,000.

Minn., Minneapolis — School — Bd. Educ. having plans prepared by Rose & Harris, engrs., Auditorium Bldg., addition and alteration. About $65,000.

Minn., Owatonna—High School—Dist. Q, Bd. Educ. soon lets contract, 4-story. About $150,000. N. Jacobson, Owatonna, archt. Noted Apr. 26.

Minn., South St. Paul—Exchange—Northwestern Telephone Co., 39 East 5th St., St. Paul, receives bids about Sept. 18, 2-story, 42x70-ft. brick and rein.-con. About $60,000. A. H. Stem, 601 Endicott Bldg., St. Paul, archt.

Kan., Manhattan—Hotel—R. G. Gillett plans 3-story, 50x150-ft addition. About $50,000.

Neb., Blair—Store—Rudge & Guenzel, 11th and O St., plans 6- and 7-story, 130x142-ft., brick, on North St. About $500,000. G. H. Ellsworth, 1923 Cherry St., archt.

Neb., Franklin—Hotel—Nebraska Bldg. & Investment Co. had plans prepared by J. W. Salmon, archt., Orpheum Bldg., Lincoln, 3-story. About $50,000. J. Schaff, 120 South 12th St., pres.

Neb., Omaha—Store, Office and Theater—World Realty Co., 15th and Douglas Sts., having plans prepared, 4-story, 100x132-ft., rein.-con. or steel. About $200,000. W. R. McFarland, 1410 Farnam St., secy.

Neb., Omaha — Telephone — Nebraska Telephone Co., 18th and Douglas Sts., had plans prepared, 15-story, 92x132-ft., brick and tile. About $750,000. G. B. Prinz, 1033 Omaha Natl. Bank Bldg., archt.

N. D., Minot—Bank and Office—Brush-McWilliams Co. had plans prepared by Tulgren & Son, archts., 1st Natl. Bank Bldg., Milwaukee, 6-story, 25 x 140-ft. About $50,000. H. J. Halvorson 46 Main St., South Minot, vice-pres.

Mo., Kansas City — Parochial School — Parochial School for Dominican Fathers had plans prepared, 2-story, 100 x 128-ft. About $85,000. White & Dean, 311 Bellefontaine St., archts., soon receive bids.

Mo., St. Louis—See "Miscellaneous."

Mo., St. Louis—Church—Maplewood Baptist Congregation plans to build on 100x168-ft. site in Zephyr Hills, Maplewood Dist. About $50,000.

Wash., Seattle—School—School Dist. No. 1 plans addition, 4215 46th Ave., S. About $75,000. E. Blair, Central Bldg., archt.

Ore., Portland—Medical School—University of Oregon, soon lets contract. About $115,000. Lawrence, Holford, Whitehouse and Fouilhoux, archts. Noted July 5.

Cal., San Francisco—Schools—City election Nov. 27 to vote on $3,500,000 bond issue to build schools. James Rolph, Jr., mayor.

BIDS DESIRED

N. Y., Thiells—(Official)—Cottages—Until Sept. 28 by F. A. Vanderlip, pres. bd. mgrs., Letchworth Village, building 8 cottages advertised in this issue.

N. Y., Thiells—(Official)—Home—Until Oct. 5 by F. A. Vanderlip, pres. bd. mgrs., building attendent's home and service building, underground piping and conduit, underground sewer and water connections, bridge over creek; advertised in this issue.

Pa., Abington—(Official)—High School—Until Sept. 17, by Bd. Educ., for 3-story addition. About $50,000. Heacock & Hokanson, 1218 Chestnut St., Phila., archts. Noted Aug. 30.

Va., Norfolk—(Official)—Office and Loft—Until Dec. 1, by R. E. Mitchell, archt., Greenwood Bldg., 6-story 130x144-ft. concrete, for Tazwell Realty Co., Tazwell St. About $300,000. Noted Aug. 30.

O., Cleveland Heights—(Warrensville P. O.)—Grade and High School—Until Sept. 15, by F. Warner, archt., 718 Hippodrome Bldg., Cleveland. About $180,000. L. K. Bryan, 3867 Parkdale Ave., Cleveland, secy. bd. educ.

Ind., Vincennes—Church—Until Sept. 15, by First M. E. Congregation, 3-story, 67 x 115-ft. About $75,000. L. C. Bentley, 416 Perry St., pastor. L. H. Osterhage, 2nd Natl. Bank Bldg., archt. Noted July 12.

Ia., Cresco—School—Until Oct. 3 (new bids), by Bd. Educ., 2-story, brick and rein.-con. G. L. Lockhart, 391 Endicott Bldg., St. Paul, archt. Noted July 5.

Minn., Kasson—High School—Until Sept. 15, by N. E. Beard, clk. bd. educ., 2-story. About $75,000. N. Jacobson, Owatonna, archt. Noted Aug. 9.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston**—School—Bd. Educ. let contract, 3-story, 120x176-ft., brick, to J. Slotnik, 10 Lawrence St., Chelsea. About $166,973. Noted Aug. 16.

★**Conn., Waterbury**—(Official)—School—Bd. Educ. let contract to Mill Eng. & Constr. Co., Lilley Bldg., $539,916. Noted Aug. 30.

★**N. Y., New York**—Church and Parish House—5th Ave. Baptist Church, 6 West 46th St., let contract, alteration, 1½-story, 80 x 98-ft., brick and stone, to M. Eidlitz & Son, 30 East 42nd St., $75,000.

★**N. Y., New York**—Theater and Office—Jason Bldg. Co., 225 West 44th St., let contract, 5-story, 100 x 111-ft. to Margolies Constr. Co., 19 East 33rd St., $50,000. Noted Aug. 9.

★**N. J., Hillside**—School—Bd. Educ. let contract school on Roosevelt St. to Chas. Flocken, 681 Newark Ave., Elizabeth. About $51,000.

★**Pa., Swarthmore** — Dormitory — Mary Lyons School let contract, 3-story, 45x100-ft. and 45x75-ft. to Flounders Bros., 125 East 6th St., Media. About $75,000.

★**N. C., Raleigh**—(Official)—Administration, Kindergarten, etc.—Bd. Dir. State School for Blind let contract to W. B. Bassow, Raleigh, $140,000. Noted Aug. 16.

★**Ala., Albany**—Exchange—Southern Bell Telephone & Telegraph Co., 78 South Pry St., Atlanta, Ga., let contract, 2-story, rein.-con., to Baxter Bros., Huntsville, $50,000.

★**Mich., Champion**—High School—Bd. Educ. let contract, 2-story, 75x150-ft. rein.-con. and brick, to Foster Constr. Co., 534 Caswell Blk., Milwaukee. About $100,000. Noted Aug. 9.

★**Mich., Ishpeming**—Hospital—Cleveland Cliffs Iron Co. let contract, 3-story, 55 x 154-ft., brick and rein.-con., to O. W. Rosenthal & Co., 80 East Jackson Blvd., Chicago, $100,000. Noted July 19.

★**Ia., Peterson**—School—Bd. Educ. let contract, 2-story, 79 x 103-ft., to G. A. Shannon & Co., Newell, $59,000.

Minn., Faribault—School—State received low bid 2-story, 50 x 170-ft. custodial cottage at School for Feeble-Minded Girls, from H. J. Frandsen, 510 Rice St., St. Paul, $54,700. Noted Aug. 23.

★**Minn., Minneapolis**—Church—Church of Incarnation, 39th St and Pleasant Ave., let contract to H. Kelly & Co., 1029 South 3rd St., St. Paul. About $115,000.

★**Neb., Lincoln**—(Official)—Social School—J. S. Dales, secy. University, let contract to W. J. Assenmacher Co., 2020 Worthington St., $213,430. Noted Aug. 16.

★**Neb., Omaha**—Club—Omaha Athletic Club let contract 8-story, 117x132-ft., hollow tile, to J. J. Hanighen & Co., 613 South 14th St., $400,000.

TUNNEL—SAN FRANCISCO, CAL.

Contract No. 25

Bids were received by Bd. Pub. Wks., Aug. 22, for constructing tunnel aqueduct in mountain division of Hetch Hetchy Water Supply Project, from (A) R. C. Storrie & Co., 2379 Market St.; (B) Healy-Tibbitts Constr. Co., 9 Main St.; (C) Lindgren Co., 42 1st St. All bids were rejected as they exceeded the estimate. The unit bids were as follows:

	A	B	C
Section "A":			
23,725 lin.ft. lining in Tunnel No. 1	$83.00	$88.00	
400 cu.yd. additional excavation in Tunnel No. 1	10.00	9.00	
400 cu.yd. additional concrete in Tunnel No. 1	15.00	19.00	
100 cu.yd. excavation in open cut	8.00	3.00	
50 cu.yd. concrete in open cut	15.00	19.00	
10,000 lb. reinforcing steel	.10	.12	
100 weepers	20.00	5.00	
Section "B":			
9,768 lin.ft. lining in Tunnels Nos. 2, 3, 4 and 5	90.00		
200 cu.yd. additional excavation in Tunnels Nos. 2, 3, 4 and 5	10.00		
200 cu.yd. additional concrete in Tunnels Nos. 2, 3, 4 and 5	15.00		
14,971 lin.ft. standard lined tunnel	90.00		
300 cu.yd. additional excavation in Tunnels Nos. 6, 7 and 8	10.00		
300 cu.yd. additional concrete in Tunnels Nos. 6, 7 and 8	15.00		
200 lin.ft. constructing adits	30.00		
600 cu.yd. concrete for sealing adits	15.00		
100 cu.yd. excavation in open cut	8.00		
50 cu.yd. concrete in open cut	15.00		
10,000 lb. reinforcing steel	.10		
100 weepers	20.00		
Section "C":			
12,300 lin.ft. lining in Tunnel No. 9	94.00		$115.32
800 cu.yd. additional excavation in Tunnel No. 9	10.00		10.00
700 cu.yd. additional concrete in Tunnel No. 9	15.00		30.00
12,392 lin.ft. standard lined tunnel (part of Tunnel No. 10)	94.00		115.32
900 cu.yd. additional excavation	10.00		10.00
800 cu.yd. additional concrete	15.00		30.00
7,000 lin.ft. standard lined tunnel	94.00		115.32
350 cu.yd. additional excavation	10.00		10.00
150 cu.yd. additional concrete	15.00		30.00
14,152 lin.ft. standard lined tunnel (part of Tunnel No. 11)	94.00		115.32
1,000 cu.yd. additional excavation	10.00		10.00
1,000 cu.yd. additional concrete	15.00		30.00
2,500 lin.ft. standard lined tunnel	94.00		115.32
200 cu.yd. additional excavation	10.00		10.00
200 cu.yd. additional concrete	15.00		30.00
Constructing Shaft No. 1, 613-ft. deep	250.00		146.00
Constructing Shaft No. 2, 784-ft. deep	250.00		141.00
400 cu.yd. concrete for sealing shafts	15.00		25.00
50 lin.ft. constructing adits	30.00		100.00
100 cu.yd. concrete for sealing adits	15.00		25.00
100 cu.yd. excavation in open cut	8.00		8.00
50 cu.yd. concrete in open cut	15.00		25.00
20,000 lb. reinforcing steel	.10		.08
500 weepers	20.00		4.00
Extended totals Section "A"	$1,983,725	$2,101,950	
Extended totals Section "B"	2,258,560		
Extended totals Section "C"	4,991,386		$5,916,222
Extended grand totals	9,233,671		

FEDERAL GOVERNMENT WORK

Proposed Work

R. I., Newport—Storage Buildings—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., received no bids building 3 fleet storage buildings, at Naval Station.

N. Y., New York—Dredging—U. S. Engr. Office Army Bldg., 39 Whitehall St., rejected bids opened July 30, dredging in Wappinger Creek, Tarrytown and Peekskill harbors, N. Y. Noted July 12.

BIDS DESIRED

Mass., Boston—(Official)—Lighting Fixtures—Until Sept. 28 by J. A. Wetmore, superv. archt., treas. dept., Wash., furnishing and installing in U. S. appraisers' stores; advertised in this issue.

Mass., Boston—Seawalls—Until Oct. 4 by U. S. Engr. Office, building at Ft. Warren, Boston Harbor.

R. I., Newport—(Official)—Wharf Extension—Until Oct. 6, by U. S. Engr., Newport, pile and timber extension, Ft. Greble, R. I.; advertised in this issue.

Conn., New London—Crane—Until Sept. 24, by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., furnishing one 30-ton revolving crane.

Wash., D. C.—Lumber—Until Sept. 28, by Comrs. D. C., furnishing 1220 pieces Georgia pine bridge lumber. O. P. Newman, comr.

Wash., D. C.—Storage—Until Sept. 24, by Bureau Yards and Docks (F. R. Harris, ch.) Navy Dept., Wash., building for storage of models.

Va., Waynesboro—Post Office—Until Oct. 15, by J. A. Wetmore, superv. archt., treas. dept., Wash.

W. Va., Wheeling—Power House—Until Oct. 2, by U. S. Engr. Office, Wheeling, at Dam No. 24, Ohio River.

Fla., Key West—Tent Houses—Until Sept. 28, by J. A. Wetmore, superv. archt., treas. dept., tent houses for U. S. Marine Hospital.

Tenn., Memphis—Levee Work—Until Sept. 18, by Mississippi River Comn., 1st and 2nd Dists., furnishing 70,000 cu.yd. earthwork, Upper St. Francis Levee Dist.

Ky., Louisville—Lock Gates—Until Oct. 1, by U. S. Engr. Office, furnishing and building gates for Lock No. 43, Ohio River.

Mich., Bad Axe—Post Office—Until Oct. 12, by J. A. Wetmore, superv. archt., treas. dept., Wash.

★N. Y., New York—Automatic Sprinkler System—Bureau Yards and Docks, Navy Dept., Wash., let contract to General Fire Extinguisher Co., 275 West Exchange St., Providence, R. I., $64,405.

Colo., Denver—(Official)—Movable Crest, Service Bridge, Hoist Cars, etc.—Until Oct. 15, by U. S. Rec. Ser., Denver, for Dobson Dam, Milk River Project, Montana; advertised in this issue.

Cal., Mare Island—(Valleja P. O.)—Grading—Until Sept. 17 by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., grading at Navy Yard.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Me., Portland—Dredging—U. S. Engr. received low bids dredging Portland Harbor, from Maryland Dredging & Contr. Co., 1515 Fidelity Bldg., Baltimore, 15.8c. per cu.yd.; Coastwise Dredging Co., 1001 Bk. Com. Bldg., Norfolk, 17.4c.; Bay State Dredging & Contr. Co., 247 Atlantic Ave., Boston, 18.3c.

★Mass., Boston — Automatic Sprinkler System—Bureau Yards and Docks, Navy Dept., Wash., let contract to General Fire Extinguisher Co., 275 West Exchange St., Providence, R. I., $22,245.

★Mass., Hingham—Magazine Storehouse—Bureau Yards and Docks, Navy Dept., Wash., let contract building 2 magazine storehouses to Kennedy & Peterson Constr. Co., 7 Water St., Boston, $109,800. Noted Sept. 6.

★Conn., New London—Submarine Base, Dredging, etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract building submarine base, dredging and removing piers and bulkhead to T. A. Scott Co., Inc., 292 Pequot Ave., $86,520. Noted Aug. 30.

★N. Y., New York—Dredging—U. S. Engr. Office, Army Bldg., 39 Whitehall St., let contract dredging Hudson River to American Pipe & Constr. Co., 112 North Broad St., Phila., $96,720. Noted May 17.

★N. Y., New York—Dredging—U. S. Engr., 39 Whitehall St., New York City, let contract dredging in Staten Island Sound to G. H. Brevmann, 17 Battery Pl., $100,792. Noted June 21.

Pa., Phila.—Extension to Quartermaster's Depot—Bureau Yards and Docks, Navy Dept., Wash., received low bids from F. W. Marks Constr. Co., Finance Bldg., $226,226; Cramp & Co., Denckla Bldg., $227,700; Turner Concrete Steel Co., 1713 Sansom St., $229,500. Noted Aug. 9.

Wash., D. C.—Emergency Hospital—Bureau Yards and Docks, Navy Dept., received low bid, at Annapolis, from J. Walters Bldg. Co., 23 East Centre St., $96,000; Price Constr. Co., 210 Maryland Trust Bldg., $111,500; J. H. Miller, Eutaw and Franklin St., all of Baltimore, $137,600. Noted July 12.

★Wash., D. C.—Magazine Storehouses—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., let contracts as follows: 1 at St. Juliens Creek, Va., to J. H. Wiese, 1301 City Nat'l. Bank Bldg., Omaha $64,750; 1 at Ft. Mifflin, Pa., J. H. Miller, Miller Bldg., Baltimore, $62,700; 2 at Lake Denmark, N. J., Circle Constr. Co., 51 East 42nd St., New York City, $196,000. Noted Sept. 6.

★Wash., D. C.—War Dept. let contract nitrate plant to be constructed somewhere in Virginia to J. G. White Engr. Corp., 43 Exchange Pl. About $4,000,000. Engineers of this company and government engineers are now in the field surveying for site.

Wash., D. C.—Refuse and Garbage—L. Brownland, Comr. Dist. of Columbia, received low bids Sept. 5, collecting and disposing of miscellaneous refuse and garbage, etc., (a) price for 1 year, (b) price each year for 5 consecutive years, from M. R. Ready, 26th and Benning Rd., (a) $74,500, (b) $64,500; J. W. Bean, 4th and M St., (a) $74,800; (b) $64,000. Noted Aug. 16.

★S. C., Charleston—Shell House, etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract shell house, torpedo storehouse and magazine building at Navy Yard and Naval Ammunition Depot to Simons-Mayrant Co., 18 Broad St., Charleston, $117,080. Noted Sept. 6.

Ga., Forsyth—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids Sept. 6, from J. H. Wilder, Columbus Rd., Macon, $30,917; W. J. Brent, 506 Bd. Trade Bldg., Norfolk, $41,518; A. Blair, 11 South Lawrence St., Montgomery, Ala., $45,734. Noted Aug. 2.

MISCELLANEOUS

Proposed Work

Pier—Chester, Pa.—Harbison-Walker Refractories Co. having plans prepared, new pier foot Welsh St.

Piers — Cornwells, Pa. — Traylor Shipbuilding Co. plans to build 5 piers.

BIDS DESIRED

Sewer Flushing Machine—Mass., New Bedford—(Official)—Until Sept. 19, by G. H. Nyes, city engr.; advertised in this issue.

Incinerating Plant or Crematory—Trenton, N. J.—(Official)—Until Sept. 28, by City, building addition to present crematory. D. B. La Barre, dir. pub. safety.

Pier—Phila., Pa.—(Official)—Until Sept. 28, by Dept. Wharves, Docks and Ferries, 552 Bourse Bldg., on Delaware River at Penn Treat Park. Plans and specifications on file at this office. G. S. Webster, dir.; advertised in this issue. Noted Aug. 9.

Flood Control Works — Dayton, O. — (Official)—Until Nov. 15, by E. M. Kuhns, secy. bd. dir. Miami Conservancy Dist., building dams and appurtenances; advertised in this issue.

Flood Control—Dayton, O.—(Official)—Until Nov. 15, by Bd. Dir. Miami Conservancy Dist., flood control works at Dayton and Hamilton. E. M. Kuhns, secy.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Duct Line—Brooklyn, N. Y.—Pub. Ser. Comn., 120 Bway., New York City, received low bids for duct line for part of Eastern Pkway. Rapid Transit R.R., from W. G. Cooper, 220 Bway., $38,697; Rodgers & Haggerty, 103 East 125th St., both of New York City, $40,524; Knight & De Micco, 2353 Washington Ave., $40,950. Noted Aug. 30.

Miscellaneous (Continued)

Retaining Wall—Ft. Wayne, Ind.—Bd. Pub. Wks. received low bids, on Syp Run Ave., from Moellering Constr. Co., Murray St., $10,617; and Indiana Eng. Co., $11,725.

★**Ore Bins and Trestles—Herculaneum, Mo.**—(Official)—St. Joseph Lead Co. let contract building ore bin and rein.-con trestle to Unit Constr. Co., Title Guaranty Bldg., St. Louis, $150,000.

Sea Wall—Corpus Christi, Tex. — City soon lets contract, rein.-con. About $1,000,000. R. Murray, mayor.

Pier—San Francisco, Cal.—State Board Harbor Comrs. received low bids pier, foot Montgomery St., from Healy-Tibbits Constr. Co., 9 Main St., $328,920 and $318,993; J. D. Hannah, Chronicle Bldg., $356,950, $336,950; Clinton Constr. Co., 2391 Clay St., $388,250, $368,000.

Pipe Line—Tracy, Cal.—Dir. West Side Irrigation Dist. received low bids installing 2¼ mi. wood-stave pipe line from Pacific Tank and Pipe Co., 318 Market St., $79,300; Redwood Manufacturing Co., Hobart Bldg., both of San Francisco, $80,500.

SECRETARY OF AGRICULTURE ANNOUNCES APPORTIONMENT FOR FISCAL YEAR ENDING JULY 30, 1919

The Secretary of Agriculture has announced the apportionment of $14,550,000 of Federal funds to be used in the fiscal year ending June 30, 1919, by the several states in the construction and maintenance of rural post roads, as follows:

Alabama	$313,456.47
Arizona	205,540.58
Arkansas	250,018.47
California	456,167.23
Colorado	257,278.92
Connecticut	92,216.45
Delaware	24,411.99
Florida	170,723.88
Georgia	403,909.45
Idaho	182,471.55
Illinois	658,323.48
Indiana	406,230.18
Iowa	434,653.61
Kansas	429,131.88
Kentucky	292,984.62
Louisiana	203,755.29
Maine	144,807.42
Maryland	130,871.43
Massachusetts	221,261.85
Michigan	435,356.37
Minnesota	425,865.40
Mississippi	268,751.60
Missouri	508,603.98
Montana	298,520.89
Nebraska	319,445.25
Nevada	193,229.82
New Hampshire	62,610.11
New Jersey	177,357.22
New Mexico	238,634.55
New York	749,674.20
North Carolina	342,556.47
North Dakota	229,585.91
Ohio	558,043.42
Oklahoma	346,489.34
Oregon	236,332.74
Pennsylvania	690,145.78
Rhode Island	34,972.38
South Carolina	215,014.08
South Dakota	243,175.61
Tennessee	340,663.51
Texas	876,986.70
Utah	170,763.17
Vermont	68,128.92
Virginia	298,120.77
Washington	216,530.19
West Virginia	159,713.89
Wisconsin	382,707.20
Wyoming	183,805.78
Total	$14,550,000.00

TUNNEL—NEW YORK, N. Y.

Bids were received by Bd. of Water Supply, Sept. 11, for constructing Shandaken Tunnel, 18 mi. long, for carrying water from Schoharie Reservoir to Esopus Creek near Alleben, N. Y., from (A) Degnon Contr. Co., 68 Hunterspoint Ave., Long Island City; (B) Booth & Flinn, Ltd., 17 Battery Pl.; (C) P. McGovern & Co., Ave. A and 60th St. The tunnel will be of horseshoe shape, 11¼ ft. high by 10¾ ft. wide, and will be lined with concrete; also 8 shafts. The work was divided into two portions, "North" and "South," and bids were received covering the entire tunnel and for portions. The Degnon Contr. Co. and P. McGovern submitted bids on portions as well as on the entire job. The unit bids were as follows:

Item	Description	Unit	Quantity					
			North Portion	South Portion	Total	A	B	C
1	Sinking shafts in earth	cu.yd	600	300	900	$20.00	$40.00	$40.00
2	Sinking shafts in rock	cu.yd	9,700	17,000	26,700	40.00	40.00	40.00
3	Rock excavtion in tunnel	cu.yd	250,000	315,000	565,000	11.20	13.60	11.00
4	Enlargement of shafts and tunnel in rock	cu.yd	300	400	700	12.00	15.50	9.00
5	Earth excavation in tunnel	cu.yd	0	3,200	3,200	10.00	40.00	12.00
6	Enlargement in earth	cu.yd	0	100	100	20.00	40.00	8.00
7	Furnishing steel roof support	lb	275,000	350,000	625,000	.03	.05	.04
8	Erecting steel roof support	lb	250,000	325,000	575,000	.01	.02	.015
9	Permanent timbering	M ft.b.m	100	225	325	70.00	80.00	75.00
10	Temporary timbering	M ft.b.m	200	250	450	80.00	60.00	75.00
11	Pumping during construction	million ft.-gal	750,000	750,000	1,500,000	.10	.30	.10
12	Drainage channels	Lin.ft. of shaft and tunnel	43,530	55,170	98,700	2.00	1.00	2.00
13	Forms for shaft lining	Shaft ft	1,320	2,000	3,320	8.00	4.00	20.00
14	Forms for tunnel lining	Tunnel ft	42,327	53,180	95,507	4.00	2.00	2.60
15	Concrete in shafts	cu.yd	3,500	5,500	9,000	12.00	8.75	12.00
16	Concrete in tunnel	cu.yd	82,000	103,000	185,000	9.00	8.75	6.75
17	Excess concrete	cu.yd	500	500	1,000	....	......	....
18	Dry packing in tunnel	cu.yd	1,100	1,600	2,700	3.00	.75	2.00
19	Drilling 1¼-in. or smaller holes	lin.ft	600	1,800	2,400	.30	.20	.25
20	Drilling 1¾-in. to 2½-in. holes	lin.ft	600	1,000	1,600	.40	.35	.30
21	Steel pipe for grouting, etc	lin.ft	18,000	22,000	40,000	.20	.35	.30
22	Making connections for grouting	connection	2,700	3,300	6,000	1.00	3.00	1.50
23	Sand for grout	ton	5,000	6,000	11,000	1.50	2.00	1.50
24	Mixing and placing grout	cu.yd	10,000	12,000	22,000	4.00	10.50	1.50
25	Earth excavation for roads	cu.yd	41,000	3,000	44,000	1.50	6.00	2.50
26	Rock excavation for roads	cu.yd	13,500	500	14,000	3.50	6.00	7.50
27	Extra earth excavation	cu.yd	10,000	60,000	70,000	1.50	6.00	10.00
28	Extra rock excavation	cu.yd	24,000	4,000	28,000	3.50	6.00	7.50
29	Refilling and embanking	cu.yd	10,000	25,000	35,000	.90	1.00	.60
30	Removal of soil	cu.yd	2,000	4,000	6,000	.75	1.00	.75
31	Surface dressing of earth	cu.yd	2,000	4,000	6,000	1.25	1.00	1.25
32	Timber not in tunnel	M ft.b.m	100	100	200	50.00	80.00	90.00
33	Concrete in unreinforced parts of open-cut aqueduct	cu.yd	0	1,500	1,500	10.00	8.75	5.00
34	Concrete in gate-chambers and walls	cu.yd	4,500	3,000	7,500	10.00	8.75	5.00
35	Reinforced concrete not in tunnel	cu.yd	380	580	960	15.00	8.75	6.20
36	Finishing concrete floors	sq.yd	800	120	920	.50	2.00	2.70
37	Portland cement	bbl	195,000	250,000	445,000	2.50	2.75	1.95
38	Steel for reinforcing concrete	lb	30,000	35,000	65,000	.08	.06	.06
39	Structural steel	lb	240,000	90,000	330,000	.06	.07	.08
40	Steel picket fencing	lb	0	16,500	16,500	.06	.10	.12
41	Miscellaneous iron and steel	lb	23,000	7,000	30,000	.12	.10	.10
42	Galvanizing	lb	75,000	25,000	100,000	.04	.04	.06
43	Miscellaneous metals	lb	2,000	1,000	3,000	.80	.50	1.00
44	Caring for metal work	lb	45,000	1,000	46,000	.025	.04	.03
45	Cast-iron and welded steel pipe	lb	130,000	15,000	145,000	.06	.10	.07
46	Tile pipe, 6 in. and less	lin.ft	9,000	1,000	10,000	.20	.75	.50
47	Tile pipe, 8 to 12 in	lin.ft	2,500	4,000	6,500	.80	1.75	1.00
48	Tile pipe, 12 to 18 in	lin.ft	200	100	300	1.50	5.00	2.00
49	Bluestone wall masonry	cu.yd	200	350	550	4.00	10.00	13.00
50	Grouted bluestone paving	cu.yd	0	650	650	4.00	10.00	7.25
51	Dry rubble masonry and paving	cu.yd	600	400	1,000	3.00	8.00	3.00
52	Crushed stone, gravel and sand	cu.yd	1,000	500	1,500	2.00	3.00	2.50
53	Tunnel muck road surfacing	cu.yd	1,200	1,000	2,200	1.25	5.00	1.40
54	Bituminous macadam surfacing	sq.yd	900	200	1,100	3.00	5.00	1.90
55	Reinforced- concrete ladders	lin.ft	40	20	60	5.00	5.00	5.00
56	Excavating masonry	cu.ft	500	500	1,000	1.50	.75	.60
57	Dressing masonry	sq.ft	100	100	200	.20	.50	.65
58	Shaft houses	house	3	4	7	5,000.00	3,500.00	1,500.00
59	Intake Chameber superstructure	lump sum	1	0	1	40,000.00	50,000.00	40,000.00
60	Cranes in intake chamber	lump sum	1	0	1	10,000.00	30,000.00	12,000.00
61	Wooden fences and guard-rails	lin.ft	8,000	1,100	9,100	.50	1.50	.75
62	Man-proof fence	lin.ft	10,000	17,000	27,000	.75	.75	2.25
63	Medical and surgical aid	Practitioner-month	84	84	168	200.00	350.00	300.00
64	Sanitary services	month	84	84	84	300.00	2,000.00	2,000.00
65	Chlorinated lime	lb	15,000	15,000	30,000	.05	.25	.05
66	Liquid chlorine	lb	20,000	30,000	50,000	.10	.25	.25
67	Chlorine dosing machines	machine	4	5	9	1,500.00	3,500.00	1,500.00
68	Locker houses	house	3	4	7	5,000.00	12,000.00	7,500.00
69	Section offices	office	1	1	2	7,000.00	14,000.00	10,000.00
70	Cleaning up	lump sum	1	1	1	40,000.00	50,000.00	20,000.00
	Extended totals					$12,138,000	$12,374,000	$14,800,000

SEARCHLIGHT SECTION

Contracts To Be Let

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue mailed the next day.

PROPOSALS

PROPOSALS

Bids received until October 9, 1917.

Barge Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS.
Albany, N. Y.,
September 7th, 1917.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, October 9th, 1917, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

1

CONTRACT NO. 83.

Erie Canal—Sections 10 and 11.

For completing the canal at Tonawanda and removing a guard-lock and coffer-dam near Sulphur Springs.

Sheets 1 to 6 inclusive.

2

CONTRACT NO. 163.

Erie Canal—Sections 9 and 10.

For raising Spier's Road bridge, completing crests of spillways and other work between Rochester and Lockport.

Sheets 1 to 5 inclusive.

3

CONTRACT NO. 164.

Erie Canal—Section 8.

For completing the construction of the canal at certain locations between Lyons and Newark and for constructing a retaining dam at Macedon.

Sheets 1 to 9 inclusive.

And for the construction of barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

4

TERMINAL CONTRACT NO. 15-M.

Electrical equipment and machinery for operating and lighting the Utica Terminal lock.

Contract plans, sheets 1-11, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans of drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract) in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposals shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

PROPOSALS FOR MACHINERY.—Office, Mississippi River Commission, 1st and 2nd Districts, Customhouse, Memphis, Tenn.—Sealed proposals will be received here until 11 A.M., Sept. 26, 1917, and then publicly opened, for furnishing and delivering Boiler Feed Pump, Feed Water Heater, Centrifugal Sand Pump, Engines and Single Drum Hoist. Information on application.

PROPOSALS

Bids received until September 20, 1917.

Highway Work

OFFICE OF THE STATE COMMISSION
OF HIGHWAYS.
Albany, N. Y.

Sealed proposals will be received by the undersigned at their office No. 55 Lancaster St., Albany, N. Y., at one o'clock on Thursday, the 20th day of September, 1917, for the construction and completion of highways in the following counties:

Albany (One highway, 0.12 Mi.).
Hamilton (One highway, 4.54 Mi.).
Montgomery (One highway, 7.10 Mi.).
Niagara (Two highways, 0.61 and 8 Mi.).
Oneida (One highway, 0.70 Mi.).
Onondaga (One highway, 2.37 Mi.).
Suffolk (One highway, 3.87 Mi.).
Westchester (One highway, 1.75 Mi.).
Wyoming (One highway, 6.99 Mi.).

And also for the following repair contracts:—

Cattaraugus (One contract—resurfacing).
Monroe (One contract—resurfacing).
Oswego (One contract—surface treatment).

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineer in whose division the roads to be improved are located. The addresses of the Division Engineers and the counties of which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" on the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

Bids received until September 24, 1917.

Street Paving

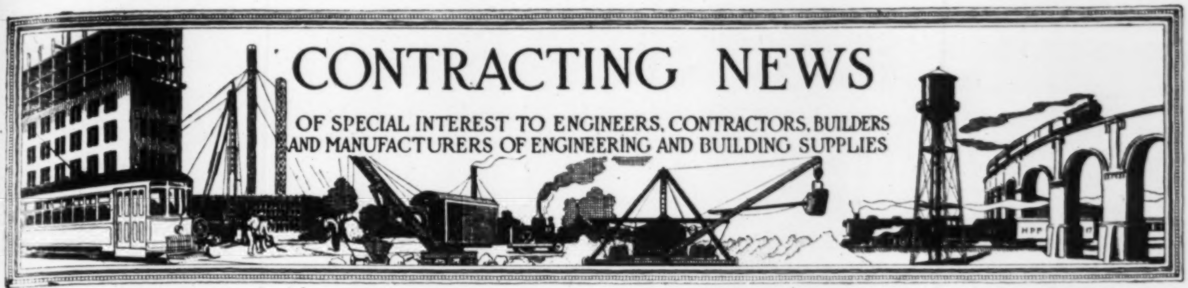
Newburgh, N. Y.

Sealed proposals will be received by the undersigned up to four o'clock, P.M., 24th of September, 1917, for the paving and curbing of Liberty Street, Newburgh, N. Y., in either vitrified brick, asphalt block or bitulithic — approximately 8075 square yards. Certified check of $1000 to accompany each bid. Right reserved to reject bids.

HENRY WILSON, City Manager,
Newburgh, N. Y.

PROPOSAL FOR CONSTRUCTIION OF WHARF EXTENSION—Office of U. S. Engineer, Newport, R. I.—Sealed proposals will be received here until 12 o'clock noon, October 6, 1917, and then opened, for construction of pile and timber extension to wharf at Fort Greble, R. I. Further information on application.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., Sept. 7, 1917—Sealed proposals will be opened in this office at 3 P.M. September 28, 1917, for furnishing and installing interior lighting fixtures in the United States appraisers' stores at Boston, Mass., in accordance with drawings and specifications, copies of which may be had at this office. Proposals are desired only from those qualified to produce work of the highest grade, both artistically and mechanically, and the right is reserved to refuse to send the drawings and specification to or to receive proposals from anyone who, in the opinion of the Supervising Architect, is not so qualified. JAS. A. WETMORE, Acting Supervising Architect.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 79 to 85 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Sept. 24.	Akron, O. Adv. Sept. 13.	Sept. 13
Sept. 25.	Jersey City, N. J.	Sept. 13
Sept. 26.	North McGregor, Ia. Adv. Sept. 13 and 20.	Sept. 13
Sept. 26.	North Tonawanda, N. Y. Adv. Sept. 13 and 20.	Sept. 13
Sept. 25.	Bayonne, N. J.	Sept. 13
Oct. 1.	St. Paul, Minn.	Sept. 20
Oct. 2.	Johnstown, N. Y. Adv. Sept. 13 and 20.	Sept. 13
Oct. 2.	Lewisburg, O. Adv. Sept. 20.	Sept. 20
Oct. 2.	Toronto, Ont.	Sept. 13
Oct. 10.	Polk, Pa.	Sept. 20

SEWERS

Sept. 22.	Stamford, Conn. Adv. Sept. 13.	Sept. 13
Sept. 24.	Bridgeport, Conn. Adv. Sept. 13 and 20.	Sept. 13
Sept. 24.	Rocky River, O.	Sept. 13
Sept. 24.	Summit, Ill.	Sept. 20
Sept. 24.	Appleton, Wis.	Sept. 20
Sept. 25.	St. Joseph, Mich.	Sept. 20
Sept. 27.	Cleveland, O.	Sept. 20
Sept. 27.	Newark, N. J.	Sept. 20
Sept. 28.	Cedar Rapids, Ia.	Sept. 13
Sept. 25.	Columbia, S. C.	Sept. 13
Sept. 29.	Hagerstown, Md. Adv. Sept. 13.	Sept. 13
Oct. 8.	Stratford, Conn. Adv. Sept. 20.	Sept. 20

BRIDGES

Sept. 24.	Los Angeles, Cal.	Sept. 13
Sept. 24.	Greenfield, Ind.	Sept. 20
Sept. 25.	Preston, Minn.	Sept. 20
Sept. 25.	Enid, Okla.	Sept. 20
Sept. 27.	Jersey City, N. J.	Sept. 13
Sept. 27.	Mankato, Minn.	Sept. 20
Sept. 28.	Akron, O. Adv. Sept. 13.	Sept. 13
Oct. 1.	Indiana	Sept. 20
Oct. 1.	Elkins, W. Va.	Sept. 20
Oct. 2.	Reading, Pa. Adv. Sept. 20.	6Sept. 20
Oct. 2.	West Palm Beach, Fla.	Sept. 20
Oct. 2.	Woodbine, Ga.	Sept. 20
Oct. 2.	Olympia, Wash.	Sept. 20
Oct. 2.	Albany, N. Y. Adv. Sept. 6 and 13.	Sept. 6
Oct. 2.	Columbus, O. Adv. Sept. 13.	Sept. 13
Oct. 4.	Texarkana, Ark. Adv. Sept. 13.	Sept. 13
Oct. 5.	Corydon, Ind.	Sept. 20
Oct. 9.	Walker, Minn.	Sept. 20
Oct. 20.	Pennsylvania	Sept. 20

STREETS AND ROADS

Close Bids		News-Record See Eng.
Sept. 22.	Cameron, La.	Aug. 30
Sept. 22.	Racine, Wis.	Sept. 13
Sept. 24.	Eutaw, Ala.	Sept. 6
Sept. 24.	Livingston, Ala.	Sept. 6
Sept. 24.	Newburgh, N. Y. Adv. Sept. 13 and 20.	Sept. 13
Sept.24.	Cincinnati, O.	Sept. 20
Sept. 24.	St. Paul, Minn.	Sept. 20
Sept. 24.	Wentworth, N. C.	Sept. 20
Sept. 25.	Indiana	Sept. 13
Sept. 25.	New Orleans, La.	Sept. 13
Sept. 25.	New Jersey	Sept. 13
Sept. 25.	Linden, N. J.	Sept. 20
Sept. 25.	The Dallas, Ore.	Sept. 20
Sept.25.	Charleston, S. C. Adv. Sept. 20.	Sept. 20
Sept. 26.	Cleveland, O.	Sept. 20
Sept. 26.	Michigan	Sept. 20
Sept. 26.	Hamilton Square, N. J	Sept. 20
Sept. 27.	Salt Lake City, Utah	Sept. 13
Sept. 27.	Weehawken, N. J.	Sept. 20
Sept. 27.	Newark, N. J.	Sept. 20
Sept. 27.	Steubenville, O.	Sept. 20
Sept. 28.	Brooklyn, N. Y.	Sept. 20
Sept. 28.	Bryan, O.	Sept. 20
Sept. 28.	Indiana	Sept. 20
Sept. 29.	Russellville, Ala.	Sept. 20
Sept. 30.	Indianapolis, Ind.	Sept. 6
Oct. 1.	Lincoln, Neb.	Sept. 6
Oct. 1.	Miami, Fla.	Sept. 20
Oct. 1.	Indiana	Sept. 20
Oct. 1.	Oroville, Cal.	Sept. 20
Oct. 2.	Indiana	Sept. 20
Oct. 2.	Maryland Adv. Sept. 20.	Sept. 20
Oct. 3.	Indiana	Sept. 20
Oct. 4.	Carrollton, Ala.	Sept. 20
Oct. 5.	Indiana	Sept. 20
Oct. 6.	Bowling Green, O.	Sept. 13
Oct. 8.	California	Sept. 20
Oct. 9.	Pennsylvania Adv. Sept. 20.	Sept. 20
Oct. 11.	Newton, N. J. Adv. Sept. 20.	Sept. 20
Oct. 11.	Oneonta, Ala.	Sept. 13
Oct. 13.	Wedowee, Ala.	Sept. 20
Oct. 15.	Newark, N. J.	Sept. 13
Oct. 16.	Cape May, N. J.	Sept. 6
Oct. 16.	Pennsylvania	Sept. 20

EXCAVATION AND DREDGING

Sept. 24.	Barstow, Tex.	Sept. 13
Sept. 24.	Lewiston, Ill.	Sept. 13
Sept. 25.	Fairmont, Minn.	Sept. 20
Sept. 25.	Storm Lake, Ia.	Sept. 20
Sept. 27.	Slayton, Minn.	Sept. 20
Sept. 28.	Slayton, Minn.	Sept. 20
Sept. 28.	Muncie, Ind.	Sept. 20
Oct. 1.	Le Sueur, Minn.	Sept. 20
Oct. 2.	Clarksdale, Miss.	Sept. 20
Oct. 2.	St. Cloud, Minn.	Aug. 2
Oct. 2.	Urbana, Ill.	Sept. 6
Oct. 3.	Anoka, Minn.	Sept. 20
Oct. 5.	Savannah, Ga.	Sept. 20
Oct. 9.	Albany, N. Y. Adv. Sept. 13 and 20.	Sept. 13
Oct. 10.	Lafayette, Ind.	Sept. 20
Oct. 15.	Willmar, Minn.	Sept. 13

BUILDINGS

Sept. 28.	Theills, N. Y. Adv. Sept. 13 and 20.	Sept. 13
Sept. 30.	Eden, S. D.	Sept. 20
Oct. 1.	San Francisco, Cal	Sept. 20
Oct. 2.	Castleton, N. Y.	Sept. 20
Oct. 3.	Cresco, Ia.	Sept. 13
Oct. 5.	Thiells, N. Y. Adv. Sept. 13 and 20.	Sept. 13
Dec. 1.	Norfolk, Va.	Sept. 13

FEDERAL GOVERNMENT WORK

Close Bids		News-Record See Eng.
Sept. 17.	Philadelphia, Pa.	Sept. 20
Sept. 24.	Farmington, N. M.	Sept. 6
Sept. 24.	New London, Conn.	Sept. 13
Sept. 24.	Washington, D. C.	Sept. 13
Sept. 24.	New Orleans, La.	Sept. 20
Sept. 25.	Washington, D. C.	Sept. 20
Sept. 25.	Washington, D. C. Adv. Aug. 30.	Aug. 30
Sept. 26.	Memphis, Tenn. Adv. Sept. 6 to 20.	Sept. 6
Sept. 28.	Key West, Fla.	Sept. 13
Sept. 28.	Washington, D. C.	Sept. 13
Sept. 28.	Boston, Mass. Adv. Sept. 13 and 20.	Sept. 13
Sept. 29.	Memphis, Tenn. Adv. Sept. 20.	Sept. 20
Oct. 1.	Twin Falls, Idaho	Aug. 30
Oct. 1.	Louisville, Ky. Adv. Sept. 13 and 20.	Sept. 13
Oct. 1.	Cleveland, Ohio	Sept. 6
Oct. 1.	Kuahua, H. T.	Sept. 20
Oct. 1.	Philadelphia, Pa.	Sept. 20
Oct. 1.	Washington, D. C.	Sept. 20
Oct. 2.	San Francisco, Cal.	Sept. 6
Oct. 2.	Wheeling, W. Va. Adv. Sept. 13 and 20.	Sept. 13
Oct. 2.	Galveston, Tex.	Sept. 20
Oct. 2.	San Francisco, Cal. Adv. Sept. 20.	Sept. 20
Oct. 4.	Boston, Mass. Adv. Sept. 13 and 20.	Sept. 13
Oct. 4.	St. Peter, Minn.	Sept. 6
Oct. 6.	Newport, R. I. Adv. Sept. 13 and 20.	Sept. 13
Oct. 12.	Bad Axe, Mich.	Sept. 13
Oct. 15.	Denver, Colo. Adv. Sept. 13.	Sept. 13
Oct. 15.	Waynesboro, Va.	Sept. 13
Oct. 15.	El Paso, Tex. Adv. Sept. 20.	Sept. 20
Oct. 23.	Andalusia, Ala.	Sept. 20
Oct. 24.	Bakersfield, Cal. Adv. Sept. 20.	Sept. 20
Oct. 26.	Mt. Carmel, Ill.	Sept. 20
Oct. 28.	Waterloo, N. Y.	Sept. 20
Oct. 30.	Key West, Fla. Adv. Sept. 6 and 13.	Sept. 6

MISCELLANEOUS

Sept. 25.	Harbor Improvements — Mobile, Ala.	Sept. 6
Sept. 26.	Station Finish —Brooklyn, N. Y.	Sept. 20
Sept. 28.	Incinerating Plant or Crematory—Trenton, N. J.	Sept. 13
Sept. 28.	Pier—Philadelphia, Pa. Adv. Sept. 13 and 20.	Sept. 13
Oct. 1.	Station Finish Brooklyn, N. Y.	Sept. 20
Oct. 2.	Garbage Incinerator Sharon, Pa.	Sept. 20
Oct. 8.	Elevated Railway—Brooklyn, N. Y.	Sept. 20
Oct. 17.	Pier—Manhattan Beach, Cal.	Sept. 20
Nov. 15.	Flood Control—Dayton, O. Adv. Sept. 13 and 20.	Sept. 13

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., New York—Bd. Water Supply received low bid Shadaken Tunnel, as part of Schoharie watershed development for New York City water supply, from Degnon Contg. Co., 68 Hunterspoint Ave., Long Island City, $12,138,000; Booth & Flinn, Ltd., 17 Battery Pl., $12,374,000; P. J. McGovern & Co., 50 East 42nd St., $14,500,000. Noted July 12.

Ga., Savannah—City election Oct. 9 to vote on $500,000 bond issue to rehabilitate water-works. J. Figg, supt. Noted June 14.

O., Cleveland—(Official)—Council passed ordinance to issue $250,000 bonds to improve and enlarge water system. C. F. Schulz, supt.

O., Hamilton—City will sell $10,000 bonds Sept. 26 for improving water system. E. E. Erb, aud. Noted Aug. 30.

Kan., Ashland—City to issue $16,500 bonds for water-works improvements. A. W. Hawes, supt.

Kan., Towanda—City voted $25,000 bonds to improve water-works system. A. E. Dudney, clk. Noted Aug. 2.

Water-Works (Continued)

Mont., Geraldine—City election Oct. 12 to vote on $31,500 bond issue to build water-works system.

Mo., Galena—City election Oct. 2 to vote on $100,000 bond issue to build water-works system.

Tex., Abilene—City lets contract in January for 5,000,000-gal. storage reservoir earth dams and 12 mi. 24-in. concrete pipe and 8 mi. c.-i. pipe. About $500,000. W. A. Riney, city engr.

Colo., Greeley—(Official)—City will improve water system by day labor. Work involves cement dam about 150 ft. long, extension of intake line and replacing 4 mi. wood-stave pipe with Matheson joint national coating pipe. Bonds for $150,000 sold for work. M. Seaman, supt. Noted Sept. 6.

Utah, Brigham—City election soon to vote on $60,000 bond issue to improve water-works system. F. Y. Jensen, supt.

Wash., Seattle—City had plans prepared for water mains in East Marginal Way, $80,000; portion Alki Ave., $72,518; trunk sewer for same district, $55,152. A. H. Dimock, city engr.

Ont., Burlington—Council passed bylaw to issue $17,339 bonds for water-works. P. Pawson, secy.

Ont., York Twp.—Council had plans prepared 6-in. water main on Glenholme Ave., cost $9599, also 12-in. c.-i. main on St. Johns Rd. from Runnymede to Langmuir, $18,081.

Alta., Lethbridge—Councils of Lethbridge and Hardieville plan to extend water system from one town to other. About $15,000.

BIDS DESIRED

Pa., Polk—(Official)—Until Oct. 10, by Bd. Trustees of State Institution for Feeble-minded of Western Pennsylvania, rapid sand filter plant and motor-driven centrifugal pumps in connection with water supply; advertised in this issue.

O., Lewisburg—(Official)—Until Oct. 2, by G. Wilson, supt., extending water-works system; advertised in this issue. Noted July 26.

Minn., St. Paul—(Official)—Until Oct. 1, by Bd. Control, Room 15, Court House, for 50,000- or 75,000-gal. steel tank on 75- or 100-ft. steel tower, rein.-con. or brick stack, and garage additions to power house. J. F. Druar, 314 Commercial Bldg., cons. engr. Noted Sept. 13.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Mountsville—City let contract water-works system to P. Sheirick, Mountsville. Noted June 21.

Md., Cumberland—Evitts Creek Water Co., Cumberland, received low bid addition to filtration plant from Pitt Constr. Co., Fulton Bldg., Pittsburgh. About $75,000 to $80,000. Noted Aug. 16.

★Wis., Portage—City let contract filtration system for water-works to Pittsburgh Filter Mfg. Co., Farmers Bank Bldg., Pittsburgh, $12,000.

★Mont., Poplar—City let contract water-works system to C. H. Kelley, Kalispell, $23,375.

★N. B., Woodstock—City let contract filtration plant to New York Continental Jewel Filtration Co., 15 Broad St., New York City, $64,948, repairs to pumping station to Fraser & Chalmers, of Canada, Ltd., 285 Player Hall Hill, Montreal, $25,000. Noted June 28.

SEWERS

Proposed Work

N. J., Bayonne—City plans sewer in portions West 47th St. W. L. Clarkson, city engr.

Pa., Lebanon—City had plans prepared for sewage-disposal plant. T. R. Crowell, city engr.

S. C., Spartanburg—City sold $40,000 bonds to extend sewerage system. Reid Tiell, city engr. Noted June 28.

Ky., Ashland—City plans to repair and construct sewerage system and disposal plant. F. Goshsling, city engr.

O., Marion—See "Streets and Roads."

O., Shepard—City to issue $220,000 bonds for sewage connections. H. Maetzel, city engr.

Mich., Detroit—City plans to purchase 16 acres on Connors Creek for sewage-treatment plant. About $98,000. C. F. Hubbell, city engr.

Mich., Grand Rapids—(Official)—Bd. Pub. Wks. soon receives new bids for southwest sewerage system. About $160,000. W. S. Moore, city engr. Noted Apr. 19.

Wis., Appleton—City plans to install new sewer in Nawada St. A. C. Remley, city engr.

Neb., Fremont—City plans sewage disposal plant. About $100,000. L. M. Roessler, city engr.

Mo., Kansas City—Bd. Pub. Wks. rejected bids for sewer in Dist. No. 356. About $90,000. Noted Sept. 13.

Okla., Bristow—City voted $12,000 for sewers and water-works extensions. T. B. Gibson, city clk. Noted Aug. 9.

Wash., Seattle—See "Water-Works."

Wash., Seattle—See "Streets and Roads."

Wash., Spokane—Council passed ordinance for 4th Ward trunk sewer in Dist. No. 5. About $10,300. M. Macartney, city engr.

Cal., Long Beach—See "Miscellaneous."

Cal., Los Angeles—City voted $150,000 bonds to build sewerage system to connect with main sewer near Lincoln Park. Communities of El Sereno, Newton Park, Sierra Vista, Sierra and part of Rose Hill will be benefited by same. A. C. Hensen, city engr. Noted Aug. 23.

Ont., Toronto—City plans sewer on Yonge St. About $105,000. R. C. Harris, comr. wks.

BIDS DESIRED

Conn., Bristol—(Official)—Until Sept. 25, by T. B. Steele, city clk., rebuilding sewer beds, etc.; advertised in this issue.

Conn., Stratford—(Official)—Until Oct. 8, by Bd. Sewer Comrs., for 11 mi. of 8- to 30-in. pipe sewers, sewage disposal works, etc.; advertised in this issue.

N. J., Newark—(Official)—Until Sept. 27, by Water Comrs., sewer in Sandford Ave., 500 ft. 30-in. concrete pipe sewer, 240 ft. vitr. salt glazed pipe sewer, 12 catch basins, and 5 manholes. M. R. Sherrerd, city engr. Noted Sept. 13.

O., Cleveland—Until Sept. 27, by City, installing sewers in East 171st and Searsdale Sts. R. Hoffman, city engr.

Mich., St. Joseph—(Official)—Until Sept. 25, by C. J. McMullen, city clk., for sewage-disposal plant. W. J. Cleary, city engr.

Ill., Summit—(Official)—Until Sept. 24, by Bd. Local Improvs. for sewerage system. L. F. Kennedy, clk.

Wis., Appleton—Until Sept. 24, by E. L. Williams, city clk., sewers in portions Mason, Virginia and Brewster Sts. A. C. Remley, city engr.

Minn., St. Paul—(Official)—Until Oct. 1, by H. W. Austin, purch. agent, storm-water sewer on Fairview, Summit, Macalester and Pascal Aves.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Bd. Pub. Wks. let contract sewers, Rutherford Ave., Charleston St. and alleys to T. J. O'Connell, 10 Radcliffe Rd., Brighton.

★Conn., Bridgeport—Paving and Sewer Comn. let contract Northwest Sanitary trunk sewer, Dewey St., to Brennan & Fohey, Portchester, N. Y. Noted Sept. 13.

N. Y., New York—D. Mathewson, boro. pres., received low bids sewer in (a) Boston Rd. between Harper and Boller Aves., (b) between Bollar and Corsa Aves., from Anita Constr. Co., 2975 Marion Ave., (a) $124,842, (b) same amount; O. Daniels Co., Woolworth Bldg., (b) $134,796; Lawrence Contg. Co., 240 Walton Ave., (a) $117,873, (b) $176,873; J. M. Stanton & Co., 762 East 165th St., (a) $98,564.

★N. Y., Scotia—City let contract sewage-disposal plant to E. B. Edgar, 737 Brandywine Ave., Schenectady, about $12,000. Noted Aug. 16.

N. J., Highland Park—(New Brunswick P. O.)—City received low bid for 5 mi. sanitary sewers and appurtenances from McGovern & Barnwell, New Brunswick, $51,977.

★Pa., Phila.—City let contract, addition to sewage disposal plant to F. W. Mark Contg. Co., 1428 Penn Sq., $90,000.

★Md., Cumberland—(Official)—City let contract sanitary sewer on Boulevard and storm sewer in Mary St. to Vang Constr. Co., 3rd Natl. Bank Bldg., $12,31[illegible] and $23,919, respectively. Noted Aug. 9.

★N. C., Durham—See "Streets and Roads."

★O., Cleveland Heights—(Warrensville P. O.)—(Official)—City let contracts installing segment block and vitr. pipe storm sewers as follows: Sect. 1, Gould & Maybach, 823 East 150th St., $16,566; Sect. 2, A. Marro, 2276 East 105th St., $14,903; Sect. 3, Haddad-Mall Co., Schofield Bldg., $64,297; all of Cleveland. Noted July 19.

★O., Lancaster—City let contract for sewer, grading, paving, curbing and retaining wall to Wilson & Beckler, Lancaster, $20,338.

★Ill., Hillsboro—(Official)—City let contract sewer extensions to Grabbe Granitoid Co., Alton, $14,544. Noted Aug. 16.

★Ia., Medford—City let contract for sewers and sewage-disposal plant to P. N. Kruse, Spencer, $39,014.

★Ia., Seymour—City let contract 22,000 ft. of 6- to 12-in. sewers to Moore-Seig Constr. Co., 1126½ East 4th St., Waterloo, and Cumstock & Hanson, Cedar Rapids, $13,307 and $8586, respectively; for sewage-disposal plant to Ward & Weighton, 516 Davidson Bldg., Sioux City, $16,800. Noted Aug. 30.

★Ia. Sheldon—City let contract 4 filter beds, 50x150-ft., and 1 sludge bed, 30x50-ft.; also repairing dosing chamber, to G. Gardner Sheldon, $11,842.

★Ia., Sioux City—City let contract laying storm sewer in 22nd and Jennings St. to W. B. Carter Constr. Co., Sioux City, $15,000.

★Minn., Long Lake—City let contract sewage-disposal plant to M. J. O'Neill, 60 East 6th St., St. Paul.

★Minn., St. Paul—City let contract Jefferson Cretin sewer to O'Neill & Preston, 60 East 6th St., $49,945. Noted Aug. 16.

★Tex., Elgin—City let contract sewer to H. W. Cardwell Contg. Co., Texarkana, Ark., about $12,000.

★Okla., Oklahoma—City let contract sewerage and water-works systems to A. F. Binnus, 225½ West Grand Ave., $18,000.

★Utah, Logan—City let contract sewer in Sewer Dist. No. 5 to Parrott Bros. Constr. Co., Newhouse Bldg., Salt Lake City, $19,694.

★Cal., Corcoran—City let contract installation of sewerage system and paving on Whitley Ave. to Federal Constr. Co., Sharon Bldg., San Francisco, $80,702. Noted July 19.

★Cal., Livermore—City let contract sewage-disposal plant at tuberculosis hospital to M. E. Fernandez, Prospect St., Hayward. About $16,324.

BRIDGES

Proposed Work

Pa., Phila.—Pennsylvania R.R. plans to build bascule bridge over Darby Creek and Crum River, rein.-con. bridge over Ridley River. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Miss., Winona—Montgomery Co. supervs. plan to build 30 4 x 4 to 30-ft. rein.-con. bridges. G. E. Hauser, Columbus, engr.

O., Cleveland—See "Industrials Works."

Ind., Anderson—Madison Co. prepared plans 492-ft. bridge with 30-ft. roadway over White River on 9th St. Council appropriated $80,000 for project.

Ind., Ft. Wayne—Allen Co. Comrs. appropriated $100,000 to build State St. bridge, $20,000 for 4th St. bridge and $40,000 for other bridges throughout county.

Ill., Decatur—Macon Co. plans to build bridge. About $50,000.

Minn., Fond du Lac—St. Louis Co. Comrs., Duluth, receiving bids about Nov. 1 building 600-ft. rein.-con. bridge. About $85,000.

Ark., Little Rock—City soon receives bids building Red River Bridge. Bonds for $260,000 to be sold for project. H. Levinson, city engr.

Okla., Purcell—McClain Co., Golsby Twp., voted $13,500 bonds to build bridges.

Bridges (Continued)

Cal., Riverside—City plans to build new rein.-con. bridge over Santa Ana River. About $15,000.

BIDS DESIRED

Pennsylvania—(Official)—Until Oct. 10, by State Highway Comn., Harrisburg, building bridges in various counties as follows: 3 in Clearfield County; 8 Jefferson; 3 Washington; 1 Greene; 2 Fayette; 1 Erie; 4 Crawford; 2 Berks; 3 Lancaster; 2 Sullivan; 1 Montour; 2 Columbia; 2 Northampton; 1 York; 3 Indiana; 3 Susquehanna; 4 Monroe; 1 Wayne; 6- to 36-ft. spans. W. D. Uhler, engr.

Pa., Reading—(Official)—Until Oct. 2, by Berks Co., building 3-span concrete bridge over Saucony Creek, Kutztown Boro., C. J. Rhode, co. controller; advertised in this issue.

W. Va., Elkins—Until Oct. 1, by Randolph Co., Comrs. building rein.-con. bridge over Dry Forks, 60 ft. long with 14-ft. roadway. T. Tritt, clk.

Fla., West Palm Beach—(Official)—Until Oct. 2, by Palm Beach Co. Comrs., building two 60-ft. Scherzer rolling lift steel bridges over F. E. C. Canal, at Delray and Boynton. R. F. Goodman, co. engr.

Indiana—By Co. Comrs. building bridges as follows: Oct. 1; Brazil; building Drake, Francis, Beamer and Cutshall bridges. W. O. Graeser, aud. Oct. 3: Huntington; repairs to South Jefferson St. bridges. O. E. Eviston, aud.

Ind., Corydon—Until Oct. 5, by Harrison Co., building Hottle Ford Bridge. S. C. Mauck, aud.

Ind., Greenfield—(Official)—Until Sept. 24, by Hancock Co., buidling flat-top rein.-con. bridge. C. Boone, co. engr.

Minn., Preston—Until Sept. 25, by J. Dunford, aud., Fillmore Co., building two 40-ft. through girder bridges, one 30-ft. span beam concrete bridge, one 20-ft. girder span, one 6-ft. extension to arch bridge, north of Mabel.

Minn., Walker—Until Oct. 9, by Cass Co., building 120-ft. bridge over Girl River, 18-ft. roadway. A. W. Moulster, Pine River, engr.

Kan., Mankato—Until Sept. 27, by Jewell Co., building 19 bridges. A. Bonecutter, clk.

Okla., Enid—(Official)—Until Sept. 25, by O. W. Vork, clk. Garfield Co., for 31 bridges, plans include building 20 20- to 60-ft. rein.-con. span bridges, etc. About $60,000. B. F. Lewis, co. engr. Noted Aug. 23.

Okla., Guthrie—Until Sept. 25, by Logan Co., building 19 rein.-con. bridges. About $33,000. A. A. Leer, clk.

Wash., Olympia—Until Oct. 2, by Olympia Co., building rein.-con. bridge over Des Chutes waterway; also paving 10 blocks Harrison St. About $129,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Scarsdale—(Official)—Bronx Pkway. Comn. received low bids, 2 rein.-con. arch bridges, Contr. No. 24, from R. R. Ames, 5 Adrain St., Rochester, $13,950; N. Fagnani Bros., Inc., Tucahoe, $14,015; Crownbar Constr. Co., Inc., 120 Bway., New York City, $14,602. J. Downer, engr. and secy. Noted Sept. 6.

★N. J., Newark—Bd. Freeholders Essex Co. let contract building rein.-con. I-beam bridge over Peckman River, Little Falls Rd., to A. Mathews, 31 Clinton St., $10,449. Noted Aug. 2.

★O., Columbus—Franklin Co. Comrs. let contract building bridges over Olentangy River, 3rd and Lane Ave., to Marion Constr. Co., Ruggery Bldg., Marion, and E. Elford, 104 North 3rd St., $156,578 and $153,813, respectively; removing present Lane Ave. bridge and building substructure for new Refugee Park bridge to Capitol Constr. Co., $8390 and $14,898, respectively. Noted Aug. 30.

O., Youngstown—(Official)—Dir. Pub. Ser., received low bids improving east approach to East Federal St. bridge, from S. H. De Groot, $23,622; J. McCarron, 733 Mahoning Ave., $24,275; V. Heasley, 262 Lincoln Ave., $30,464. Noted Sept. 6.

★Ind., Boonville—Warrick Co. let contract building 16 steel bridges to International Steel & Iron Co., 1243 Edgan St., Evansville, $15,713.

★Ind., Hammond—Lake Co. Comrs., Crown Point, let contract building Scherzer lift steel bridge over Calumet River to C. L. Phillips, 134 South La Salle St., Chicago, $85,000.

★Wis., Milwaukee—Milwaukee Co. let contract rein.-con. bridge over Menomonee River, on Blue Mound Rd., to Schneider Stone Co., Menomonie Falls, $16,775.

★Idaho, Swan Valley—Bonneville Co. Comrs., Idaho Falls, let contract building new Snake River Bridge to W. H. Perham, St. Anthony, $22,500.

STRUCTURAL STEEL WORK

BIDS DESIRED

Ga., Woodbine—See "Bridges."

Fla., West Palm Beach—See "Bridges."

Minn., St. Paul—See "Water-Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ind., Boonville—See "Bridges."

★Ind., Hammond—See "Bridges."

★Cal., Sacramento—See "Buildings."

REINFORCED CONCRETE

Proposed Work

Pa., Phila.—See "Bridges."

Del., Wilmington—See "Industrial Works."

W. Va., Huntington—See "Buildings."

Miss., Winona—See "Bridges."

Wis., Sheboygan—See "Industrial Works."

Minn., Duluth—See "Bridges."

Cal., Los Angeles—See "Buildings."

Cal., Riverside—See "Bridges."

Cal., Sacramento—See "Buildings."

BIDS DESIRED

W. Va., Elkins—See "Bridges."

Ind., Greenfield—See "Bridges."

Ind., Lafayette—See "Buildings."

Minn., St. Paul—See "Water-Works."

Okla., Enid—See "Bridges."

Okla., Guthrie—See "Bridges."

Wash., Olympia—See "Bridges."

Cal., Manhattan Beach—See "Miscellaneous."

Cal., San Francisco—See "Buildings."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn—See "Buildings."

N. Y., Scarsdale—See "Bridges."

★N. J., Newark—See "Bridges."

★Wis., Milwaukee—See "Bridges."

★Cal., Sacramento—See "Buildings."

Cal., San Diego—See "Miscellaneous."

STREETS AND ROADS

Proposed Work

Mass., Malden—City plans to pave 1½ mi. Salem St. E. H. Estey, city engr.

N. Y., Amsterdam—Council approved appropriation of $30,000 to be used for street paving. C. G. Messenger, city engr.

N. Y., Rochester—Council plans to pave and improve portion Front, Grove, Primrose, Gregory, Cypress, Werner, University, Minnesota, Winton, Camden and Alpha Sts. F. T. Elwood, city engr.

New Jersey—State Highway Comm., Trenton, plans to improve highway between Trenton and Camp Dix, Wrightstown. About $75,000. R. A. Meeker, state highway engr.

N. J., Bayonne—City rescinded contract let to W. T. S. Crichfield, 54 5th St., Hoboken, paving portion 39th St. New bids. Road to be 30 ft. instead of 36 ft. wide. Noted Aug. 30.

N. J., Hackensack—Bd. Freeholders Bergen Co., authorized $516,000 bond issue to build and improve county roads.

N. J., Highland Park—(New Brunswick P. O.)—Boro. Council soon receives bids grading 8th and 1st Aves,. Magnolia and Montgomery Sts. Address E. Page, 2nd Ave.

N. J., Jersey City—City soon receives bids paving Central Ave., granite block. About $50,000. C. A. Van Kuren, city engr.

N. J., Newton—Sussex Co. preparing plans improving Sparta-Ogdensburg Rd. About $25,000. W. Harden, co. engr.

N. J., South Orange—Township Com. plans macadam pavement and cement sidewalks on Walton Ave. and Wellesley St. I. T. Redfern, town engr.

N. J., Trenton—Bd. Freeholders Mercer and Monmouth Cos., Freehold, plans to rebuild 5 mi. Old York Rd. Address F. McCullough, Trenton.

Pennsylvania—State Highway Comn., Harrisburg, plans to build 8-mi. state road from Quarryville to Oxford.

Pennsylvania—State Highway Comn., Harrisburg, rejected bids road work in Cambria Co., East Taylor and Jackson Twps.; Washington Co., Cecil and North Strabane Twps.; Allegheny Co., South Fayette Twp.; Lehigh Co., Hanover Twp.; Armstrong Co., Manor Twp.; Butler Co., Clinton Twp.; Montgomery Co., Abington, Upper Moreland and Upper Dublin Twps.; Somerset Co., Somerset Twp. and Centre Co., Bellefonte Boro. Noted Aug. 23.

Pa., Brownsville—Boro. plans grading and paving portions 2nd and 18th Sts. Noted Apr. 12.

Pa., Carnegie—Boro. authorized grading, paving and curbing 6th Ave., vitr. paving block, concrete gutter and curb. O. B. Highley, boro. engr.

Pa., Monessen—City plans paving, grading and curbing Leeds and Linden Aves. and 10th St. A. W. Johns, city engr.

Pa., Punxsutawney—Boro. plans to improve West Mahoning St. and pave portions Mitchell and South Main St., brick. R. S. Van Renseler, engr.

Va., Bristol—G. M. Warren, mayor, vetoed sale of $20,000 bonds to improve streets. Noted Aug. 16.

Va., Claredon—Alexandria Co. rejected bid improving Cherrydale Rd. New bids. Noted Aug. 9.

Va., Gate City—Scott Co. plans to grade 5-mi. Bristol-Lexington Highway. E. V. St. Matin, co. engr. Noted May 24.

Va., Goochland—Goochland Co. plans to improve road from state farm to court house, 4 mi.

Va., Graham—City appropriated $10,000 to build 2 mi. waterbound macadam road.

Va., Williamsburg—City plans paving Duke of Gloucester St., 18 ft. wide, York St. and Richmond Ave., 15 ft. wide. About $20,000. J. M. Henderson, mayor.

W. Va., Edgewood—(Wheeling P. O.)—Council sold $54,000 bonds to improve streets.

W. Va., Elmgrove—City voted $32,000 bonds to pave several streets. Noted July 12.

W. Va., Stealey Heights—(Clarksburg P. O.)—Town voted $15,000 bonds pave, grade and curb, portions Stealey and Duncan Aves., Davis St. and alleys, brick and concrete. L. D. Mitchell, mayor. Noted Sept. 6.

N. C., Durham—City plans to pave 50,000 yd. streets. H. W. Kueffner, city engr.

N. C., Louisburg—Franklin Co. Comrs. will vote Oct. 9 on $20,000 bond issue for roads in Gold Mine Twp. J. D. Alston, chn.

N. C., Marion—North Cove Twp., McDowell Co., issued $50,000 bonds to build 20 mi. road from Marion Twp. line to point near Spruce Pine connecting with road leading to Johnson City, Tenn.

N. C., Nashville—City plans to pave 12,800 sq.yd. streets, asphalt, and 10,000 sq.yd. concrete. B. M. Lee, Box 157, city engr.

Fla., Lake City—(Official)—Columbia Co. Comrs. plan election Oct. 9 (change of date) to vote on $500,000 bond issue to build roads. Noted Sept. 13.

Fla., McClenny—Baker Co. will sell $75,000 bonds for road improvements in Special Rd. Dist. No. 1.

La., St. Martinsville—St. Martin's Parish to sell $300,000 bonds Oct. 13 to improve roads. Noted Sept. 13.

Ky., Harlan—Harlan Co. plans to build Pine Mt. Rd. R. Wiley, Frankfort, comr. pub. roads.

Ky., Murray—Colloway Co. plans to build road from Murray to Lynn Grove and Graves Co. line with state aid. About $13,800.

O., Bryan—(Official)—Williams Co. sold $117,500 bonds for improving roads. G. C. Beucler, co. aud. Noted Sept. 6.

O., Cincinnati—Council passed ordinance to issue $56,000 bonds to resurface and widen Freeman St. F. Krug, city engr.

Streets and Roads (Continued)

O., Cincinnati—Council pased ordinance to improve and pave Hamilton, Seager and Colorain Sts. F. Krug, city engr.

O., Marion—City Council plans to pave, build sidewalks and install sewers on several streets. About $25,000. H. H. Noyes, city engr.

O., Tiffin—Seneca Co. sold $50,000 bonds to improve roads. J. E. Hershberger, aud. Noted Sept. 6.

Ind., Crown Point—(Official)—Lake Co. sold $48,000 bonds to improve roads. M. J. Brown, treas. Noted Sept. 6.

Ind., Richmond—Wayne Co. appropriated $10,000 to improve Petersburg Turnpike.

Mich., Grand Haven—Park Twp., Ottawa Co., plans election soon to vote on $40,000 bond issue to build Alpena Rd. from Central Park to Macatawa.

Mich., Howell—Town voted $13,000 bonds to improve Detroit-Lansing Highway.

Mich., Kalamazoo—Kalamazoo Co. Rd. Comrs. soon lets contract building trunk line highway from Yorkville east to east side of Gull Lake and Turners resort.

Ill., Cairo—Bd. Local Improvs. plans to improve Cedar, Pine and 20th Sts. by paving and installing sewers. About $28,000. G. F. Dewey, city engr.

Ill., Chicago—State Highway Dept. and Federal Government appropriated $614,000 to build Dixie Highway from here to Danville through Will, Kankakee and Iroquois Cos., who will pay remaining one-fourth of estimated cost. Under plan Will Co. will pay $26,500, Kankakee, $67,200 and Iroquois, $94,500.

Ill., Chicago—Illinois Valley Way Assn. plans to build highway from here to Springfield, passing through Joliet, Morris, Ottawa, La Salle, Spring Valley, Depue, Bureau, Peoria and Mason City. State Highway Dept. and Federal Government appropriated $2,215,000 toward project. W. J. Reardon, Pekin, and C. E. Schuremam, Green Valley, interested.

Ill., Decatur—State Highway Comn., Springfield, appropriated $35,000 to build roads in Macon Co.

Ill., Elgin—City soon lets contract paving River St. and north end Douglas Ave. About $32,000. M. H. Brightman, city engr.

Ill., Pontiac—Bd. Supervs. Livingston Co. plan to build 3 mi. hard-surfaced roads, Newton, Charlotte and Graymont Twps. About $36,850. State appropriated $18,425 toward cost.

Wis., Green Bay—Brown Co. voted $175,000 bonds to build and repair roads.

Wis., Milwaukee—City Council plans widening portion Oklahoma Ave. About $101,337. G. Stahl, city engr.

Minn., Minneapolis—City plans to issue $325,000 bonds to widen portion 9th St. F. W. Cappelin, city engr.

Neb., Lincoln—City soon receives bids paving in Dists. 381 and 398, including Legro Ave., Washington and 31st Sts. A. Dobson, city engr.

Neb., Omaha—County rescinded contract let to W. E. Callahan, 1514 City Natl. Bank Bldg., for 1 mi. paving. New bids. Noted Aug. 23.

Neb., Omaha—City plans to pave 26th St., asphaltum cement, 40th St., sheet asphaltum and Jackson St., brick. J. A. Bruce, city engr.

S. D., Aberdeen—Brown Co. Comrs. voted $40,000 bonds to improve roads.

Mont., Butte—City plans to build sidewalks, crosswalks, curbs, etc. in Floral Park Addition. About $71,739. J. J. Armstrong, city engr.

Missouri—State Highway Comn., Jefferson City, plans to build highway from East St. Louis to Springfield. About $1,415,000.

Mo., Fredericktown—Madison Co. election Nov. 20 to vote on $500,000 bonds to build 3 hard-surfaced roads from Granite City to Alton, East St. Louis to Springfield and East St. Louis to Terre Haute, Ind.

Mo., St. Joseph—City plans to grade Jefferson and 28th Sts., build sidewalks on 22nd St. and pave Marion, Market and 31st Sts., asphaltic concrete. C. P. Hoff, city engr.

Mo., Stanberry—City Council passed resolution to pave portions Park and High Sts.

Arkansas—State Highway Comn., Little Rock, prepared plans 49 mi. roads, Chatfield, Edmondson and Proctor Twps., earth and gravel; about $185,000; also 7 mi. from Searcy to Smyrna, $45,000.

Ark., Fayettsville—Washington Co. Comrs. had plans prepared building 6-mi. road from Rogers to Huntsville. About $10,000.

Ark., Paragould—Greene Co. Comrs. plan to build 11-mi. road from Walcott to Cache River. About $60,000.

Ark., Texarkana—Miller Co. having plans prepared for road through county to Louisiana State line.

Tex., Albany—Shackelford Co. and State Highway Comn. having plans prepared for Ft. Worth to Roswell Highway. About $110,000. Noted May 4.

Tex., Fort Worth—Tarrant Co. Comrs. plan to build 5-mi. tarvia pike 21 ft. wide from city limits to Nine-Mile bridge. About $15,000.

Tex., Orange—Orange Co., Precinct No. 4, election Oct. 9, to vote on $30,000 bonds to build roads.

Tex., Paris—City election Oct. 9 to vote on $20,000 bond issue for paving and widening streets. Address the Mayor.

Tex., Snyder—Scurry Co. plans election Oct. 13 to vote on $100,000 bonds for building roads.

Colo., Denver—City plans to improve streets, Dists. Nos. 4 and 15. About $73,500. H. F. Meryweather, city engr.

New Mexico—State Highway Dept., Santa Fé, plans to build roads in Quay Co. Plans include Ozark Trail from Tucumcari to Montoya, 22 mi., $95,075; road from Tucumcari to Endee, 3 mi., $10,576; and 1 from Tucumcari to Glenco, $4180; Federal aid will be obtained. J. A. French, state highway engr.

Idaho, Grangeville—(Official)—City voted $35,000 bonds to build roads. W. W. Brown, treas.

Utah—(Official)—State Highway Dept., Ogden, will build Post Rd. project by force account, under supervision of State Rd. Comn. Highway will be built from Castlegate to Duchesne and from Ogden to Hooper. About $77,400 and $31,300 respectively. Noted Sept. 6.

Wash., Seattle—City council plans improving portions 14 streets and avenues and constructing sewers in same. A. H. Dimock, city engr.

Oregon—State Highway Comn., Salem, estimates cost building 18 mi. Central Oregon Highway between Rain Rock and Upper North Fork Valley, at $100,000.

Oregon—State Highway Comn., Salem, rescinded contract let to Oregon-Hassam Paving Co., Bd. Trade Bldg., Portland, for 5 mi. paving north and south of Marion on Pacific Highway. New bids. Noted Aug. 9.

Ore., Woodburn—City plans grading and laying rockolite paving on East Cleveland Ave. About $15,000.

Cal., Corona—City and Riverside Co., Riverside, plan to improve Santa Ana Canyon Rd. from Corona to Orange Co. line.

Cal., Long Beach—See Miscellaneous."

Cal., Riverside—(Official)—Bd. Supervs. Riverside Co. receiving bids about Nov. 1, grading and surfacing 21 mi. road gravel. R. W. Waterman, R. D. 1 No. 2, co. engr.

Cal., Susanville—Lassen Co. election Oct. 2 to vote on formation highway district comprising supervisorial Dists. Nos. 1, 2 and 3. Bond issue of $60,000 is proposed. State legislature appropriated like amount for project.

Ont., Erieau—City plans to build 1 mi. concrete roadway. P. Shillington, clk.

Ont., Windsor—Council passed by-law for widening alley between Ouellette and Ferry. About $13,920. M. A. Dickinson, city clk.

BIDS DESIRED

N. Y., Brooklyn—Until Sept. 28, by M. M. Connolly, boro. pres. (Queens Boro.), regulating and repaving portion Jamaica Ave., asphaltic concrete on relaid block foundation.

N. J., Hamilton Square—(Official)—Until Sept. 26, by W. C. R. Hart, town clk., improving Maple Shade Rd., macadam surface on macadam foundation, 4980 sq.yd. F. W. Tooker, engr.

N. J., Linden—Until Sept. 25 by Boro paving portion Elizabeth Ave., concrete. C. H. Smith, clk.

N. J., Newark—Until Sept. 27, by Bd. St. and Water Comrs., flagging sidewalks, South St., paving 14,000 sq.yd. asphalt, 2700 sq.yd. cement granite block, Geneva, North 6th and North Canal Sts. M. R. Sherrard, city engr. Noted Aug. 23.

N. J., Newton—(Official)—Until Oct. 11, by Bd. Freeholders Sussex Co., grading Ross' Corner Sussex Rd.; advertised in this issue.

N. J., Weehawken—(Bergen)—Until Sept. 27, by Township Com., improving Bulls Ferry Rd. and 31st St. About $30,000.

Pennsylvania—(Official)—Until Oct. 9 by State Highway Dept., Harrisburg, rebuilding roads in Cambria, Lackawanna, Washington, Allegheny, Lehigh, Butler, Westmoreland, Montgomery and Venango Cos., vitr. block and rein.-con. F. B. Black, comr.; advertised in this issue.

Pennsylvania—(Official)—Until Oct. 16 by State Highway Dept., rebuilding roads in Greene, Armstrong, Somerset and Center Cos. F. B. Black, comr.

Maryland—(Official)—Until Oct. 2, by State Rds. Comn., 601 Garrett Bldg., Baltimore, highways in Frederick and Allegany Cos.; advertised in this issue.

S. C., Charleston—(Official)—Until Sept. 25, by J. W. Martin, engr., Sanitary and Drainage Comn., 39 Broad St., paving 8500 sq.yd. concrete or asphalt; advertised in this issue. Noted Sept. 13.

Fla., Miami—Until Oct. 1, by J. F. Canova, city clk., paving, grading, rolling, scarifying and oiling Ocean Dr.

Ala., Carrollton—Until Oct. 4, by Pickens Co. Highway Comn., grading, graveling, fencing and hauling and placing concrete pipes on following roads: Carrollton and Pickens Rd., 7 mi.; State line to Pickensville, 10 mi.; Reform-McShas Rd., 10 mi.; McShas State line Rd., 12 mi.; involving 150,000 cu.yd. grading; 40,500 cu.yd. graveling; 500 stations clearing and grubbing; 3500 lin.ft. pipe and 100,000 ft. bridging. G. E. Hauser, Columbus, engr.

Ala., Russellville—Until Sept. 29, by A. J. Earle, city engr., certain grade work, gravel paving and culvert work.

Ala., Wedowee—Until Oct. 13, by Randolph Co., Comrs., grading, draining and surfacing 3½ mi. State Trunk Rd. No. 19, between Rock Mills and Georgia State line; involving 16,000 cu.yd. earth excava., 1000 cu.yd. solid rock excava. and 5000 cu.yd. top soil.

O., Bryan—(Official)—Until Sept. 28, by Comrs. Williams Co., building 1.94 mi. public highway in Springfield Twp. About $18,584 for bank run gravel and $23,202 for waterbound macadam. G. C. Beucler, aud.

O., Cincinnati—(Official)—Until Sept. 24, by E. VonBargen, purch. agt., 60,000 gal. coal tar bituminous binder for repairing bituminous and macadam streets. F. Krug, city engr.

O., Cleveland—Until Sept. 26, by City, paving Ivanhoe Rd. grade elimination. R. Hoffman, city engr.

O., Steubenville—Until Sept. 27, by G. W. Borden, dir. pub. ser., paving portion Oregon Ave. J. N. Leach, city engr.

Indiana—By Co. Comrs. building roads as follows: Sept. 29: Anderson; 2 gravel roads, Union, Jackson and Stoneycreek Twps. E. T. Flahavin, aud. Frankfort; building 4775 ft., 1345 ft., 5337 ft. gravel roads, Perry and Forest Twps. E. Spray, aud. Oct. 1: Newport; 2 gravel roads, Vermillion Twp. L. F. Wright, aud. Oct. 2: Monticello; road, Monon and Honey Creek Twps. A. G. Fisher, aud. Rensselaer; 2 stone roads, Barkly Twp. J. P. Hammond, aud. Goshen; concrete road, Concord Twp. A. R. Bemenderfer, aud. Vincennes; 12,144 ft. gravel road, Johnson Twp., 14,100 ft. Harrison Twp. J. I. Muent-

Streets and Roads (Continued)

zer, aud. Oct. 3: Bloomfield; 3 macadamized roads, Jefferson, Fairplay and Stockton Twps. G. E. Kidd, aud. Columbia; 13,508 ft. gravel road, Washington Twp. T. A. McLaughlin, aud. Oct. 5: Corydon; 2 stone roads, Webster, Boone and Harrison Twps. S. C. Mauck, aud.

Michigan—(Official)—Until Sept. 26, by F. F. Rogers, state highway comr., Lansing, building 5.983 mi. waterbound macadam road, Laketown Twp.

Washington—(Official)—Until Oct. 1, by State Highway Comn., Olympia, clearing, grading, draining and surfacing State Rd. No. 21, between Clifton and Charleston in Mason and Kitsap Cos., 10 mi., 6 mi. State Rd. No. 22, from Myers Falls, Stevens Co., and sections of Olympic and Pacific Highways. Noted Sept. 6.

Wash., Olympia—See "Bridges."

Ore., The Dalles—(Official)—Until Sept. 25, by Wasco Co. Court, grading, ditching, draining and macadamizing The Dalles-Dufur Sect. and Dufur-Kingsley Sect. of The Dalles-California Highway; also Seven Per Cent Route and Dry Creek Route of The Dalles-Mosier Rd.

California—Until Oct. 8, by State Highway Comn., 515 Forum Bldg., Sacramento, paving 7.7 mi. in Butte Co.; 16 mi. in Marin Co. and 12.4 mi. in Sonoma Co., concrete. A B. Fletcher, engr.

Cal., Oroville—Until Oct. 1, by C. F. Belding, clk., Butte Co., improving roads in Dist. No. 2.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Massachusetts**—(Official)—State Highway Comn., Boston, let contract building roads, Egremont-Sheffield Twp., to F. Fay & Co., Springfield. Noted Aug. 2.

★**Massachusetts**—(Official)—State Highway Dept., Boston, let contract paving Littleton Highway to Framingham Constr. Co., Framingham. Noted Aug. 30.

Mass., Boston — City received low bids surfacing 36,161 sq.yd. on Beacon, North Russell, Maverick Sq., Harvard, Bowdoin and South Sts. and Brighton Ave., from Bermudez Co., 246 1st St., $111,542; Rowe Contg. Co., Boston, $116,044; Warren Bros. Co., 142 Berkeley St., $112,786.

Rhode Island—(Official)—State Bd. Pub. Rds., Providence, received low bids rebuilding section East Main Rd., Portsmouth Twp., from A. Price, Narragansett Pier, $67,161; J. McCormick, 315 Taunton Ave., East Providence, $68,727; Lane Constr. Co., 37 Colony St., Meriden, Conn., $74,386. Noted Sept. 6.

★**Connecticut** — State Highway Dept., Hartford, let contract 5½ mi.concrete road in Cheshire and Hamden Twps., to Sperry Eng. Co., 82 Church St., New Haven, $127,529. Noted Sept. 6.

★**Conn., New Haven**—Permanent Paving Comn. let contract paving portion Hamilton St., to Union Paving Co., 119 Lafayette St., Schenectady, N. Y., $12,077.

★**N. Y., Brooklyn**—Dept. Parks let contract paving Ft. Hamilton Ave., Ocean Pkway, to 72nd St., asphalt, to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $128,271.

N. Y., Brooklyn — (Official) — L. H. Pounds, boro. pres., received low bids regulating and restoring pavement within area intersected by Dean St. and Nostrand Ave., from Rosenthal Eng. Contg. Co., Inc., 165 Hooper St., $30,148.

N. Y., New York—(Official)—D. Mathewson, boro. pres. (Bronx Boro.), received low bids grading, curbing, guttering, paving and repaving streets as follows: East 138th St., S. S. Davis, 437 East 139th St., $12,106, Fredburn Constr. Co., $13,792, Davney Asphalt Paving Co., 52 Vanderbilt Ave., $13,888; Sacket Ave., Fred Schneider, Westchester Ave. and Bronx Rd., $40,012, Bebalso & Baldo, 1481 Hoe Ave., $45,375, Oscar Daniels Co., Woolworth Bldg., $45,641; University Ave. Uvalde Asphalt Paving Co., 1 Bway., $16,648, Asphalt Constr. Co., 2197 Madison Ave., $17,133. Noted Aug. 30.

★**N. J., Camden**—Street Com. let contract paving Federal St. to John M. Kelly Contr. Co., 432 Market St. About $3.90 per sq.yd.

★**N. J., East Rutherford**—(P. O., Rutherford)—(Official)—City let contract paving Park Ave., granite block, to Jannarane Contr. Co., Belleville, $12,000. Noted Aug. 23.

★**N. J., New Brunswick**—Bd. Freeholders Middlesex Co., let contract paving Rahway Ave., to Meagher & Smith, 211 Market St., Perth Amboy, $74,964. Noted Sept. 6.

★**Pennsylvania**—(Official) — State Highway Comn., Harrisburg, let contract 7821 ft. bituminous concrete road in Lackawanna Co., South Abington Twp., to H. B. Sproul Constr. Co., Inc., 1055 Division St., Peekskill, N. Y., $51,218; 6513 ft. vitr. block pavement, Fayette Co., Washington Twp., Vicenzo Di Giorno, Fayette City, $45,825; grading and draining 9299 ft. road, Beaver Co., Hopewell and Moon Twps., W. S. Morrison, New Brighton, $18,851; 23,546 ft. rein. cement concrete road White and Big Beaver Twps., P. F. Connolly, Reality Bldg., Elmira, N. Y., $145,199. Noted Aug. 23.

Pennsylvania — (Official) — State Highway Comn., Harrisburg, received low bids paving 1270 ft. vitr. block pavement on road in Dauphin Co., Swarara Twp., from Stucker Bros. Constr. Co., Russ Bldg., Harrisburg, $17,857; F. J. Reilly, Lancaster, $18,184; paving 8367 ft. rein. con. road in Foster Twp., Route 96, Sect. 1, Lawrence Schultze & Sons, Fredonia, N. Y., $43,777; Jos. McCormick and Bro., 717 West 11th St., Erie, $48,116; P. F. Connolly, Reality Bldg., Elmira, N. Y., $42,232. Noted Aug. 23.

★**Pa., Williamsport** — City let contract paving Market St. bridge, creosoted wood block floor, to Busch & Stewart, Trust Bldg., $15,682.

★**Md., Baltimore**—City let contract paving Weldon Ave. and Ailsa Terrace, sheet asphalt, to F. Novak, $7740; several streets and alleys, recut granite blocks, to P. Reddington & Sons, $28,848. Noted Aug. 16.

Md., Towson—Baltimore Co. Comrs. received low bid building 1 mi. Falls Rd., concrete, from T. F. Mullan, 4001 Greenmount Ave., Baltimore, $22,574. Noted Aug. 30.

★**Va., Hampton**—Elizabeth City Co. let contract building concrete road from Hampton to Newport News to Hunter & Tignor, Hampton, $60,000.

★**N. C., Durham**—(Official)—City let contract improving streets, lake sheet asphalt, combined curb and 30-in. gutter; also concrete storm pipe sewer to Ely Constr. Co., Charlotte, $136,151.

★**Fla., Jacksonville** — City let contract paving Adams and Parker Sts., brick, to Wilson Constr. Co., Clark Bldg., Jacksonville, $1.30 and $1.27 per sq.yd.

★**Miss., Indianola**—Sunflower Co. let contract building 25 mi. gravel roads to W. A. Morrison, Grenada. Noted Aug. 2.

★**Miss., Tunica**—Tunica Co. Comrs. let contract building 41 mi. gravel roads to N. A. Dawson, 801 Guntel Bldg., San Antonio, Tex., $220,000. Noted July 26.

★**Miss., Yazoo City**—Yazoo Co. Highway Comn. let contract 7 mi. grading to Edgar Bros. Co., Canton. About $50,000. Noted Aug. 30.

★**Lousiana**—State Highway Comn., New Orleans let contract building 33 mi. road, Rd. Dist. No. 1, Coupee Parish, to Grisby Constr. Co., $125,000. Noted Aug. 16.

★**La., Amite**—Bd. Superv. Tangipahoa Parish Rd. Dist. No. 4, let contract building Kentwood and Tangipahoa Rds. to T. G. Womack, Kentwood, $13,428 and $11,250 respectively. Noted Aug. 16.

★**O., Lancaster**—See "Sewers."

★**Ind., Anderson**—Madison Co. Comrs. let contract paving Meridian Ave. to Indiana Asphalt Paving Co., 25th St. and Lake Erie & Western Ry. tracks. About $72,400.

★**Ind., Michigan City**—City let contract paving portion Vail St., asphaltic concrete, to Municipal Contr. & Supply Co., $1.04 per sq.yd.

★**Mich., Caro**—Tuscola Co. let contract building 3 mi. 16-ft. concrete trunkline highway in Akron Twp. to Hess Bros., Akron. About $37,000.

★**Mich., Detroit**—Bd. Pub. Wks. let contract paving, grading, curbing and laying 6-in. concrete foundation in Mackie, McKinstry and Konkel Aves. and Lisbon St., to F. Porath & Son, 305 Free Press Bldg., $32,802; Clarendon Ave., to J. Porath, 34 McGraw Bldg., $26,903; Alleys Nos. 849, 850, 851, 852, 853, 854 and 855, Otis Cement Constr. Co., 806 Hammond Bldg., $30,437. Mercier and Yale Sts., St. Jean, Chalmers, Dickerson, Burns, Avery, Marlborough, Newport and Eastwood Aves., asphaltic concrete, Amherst curbstone, to Detroit Asphalt Paving Co., McGraw Bldg., $146,771; La Salle Gardens, asphaltic concrete, W. B. Brady Constr. Co., $10,733; Collingwood Ave., Cleveland Trinidad Paving Co., 3409 Trumball St., Cleveland, $28,668.

★**Mich., Grand Rapids**—(Official)—Kent Co. let contract road from Belmont to Plainfield to Golden & Boter, 25 Market Ave., N. W., $18,800.

★**Illinois** — (Official) — State Highway Comn., Springfield, let contract building 50,206 ft. earth road, Sects. I and J, Tazewell Co., to Cameron Joyce & Co., Keokuk, Ia.; 6210 ft. brick road, Sect. F, Edgar Co., to A. J. Parrish, Paris; Sect. F, Effingham Co., to Parham Constr. Co., 3029 Waverly Pl., East St. Louis.

★**Ill., Chicago**—City let contract paving 18 blocks, asphaltic concrete, on East Side, to Chicago Heights Coal Co., Chicago Heights. About $80,000.

★**Ill., Flora**—(Official)—City let contract improving main, 2nd and Locust Sts. to R. R. Havshman, Sullivan, $33,659.

Ill., Galesburg—City received low bid paving North Seminary St., from J. B. McAuley, 13-15 Commercial Bldg., $20,967. Noted Aug. 2.

★**Ill., Springfield**—City let contract improving portion Carpenter St. to H. Nelch & Son, 9212 Jackson St., $.87 per sq.yd paving, 60c. per ft. curbing.

★**Ia., Davenport**—Bd. Pub. Wks. let contract paving portions Fenwood, Mound, Wilkes, 16th, Judson, Vine, Glaspell and Henry Sts., to Central Eng. Co., 809 Putnam Bldg., $10,117.

★**Ia., Mason City**—City let contract paving 3 mi. road from Mason City to Clear Lake to Bryant Asphalt Paving Co., Black Hawk Bldg., Waterloo, $1.62 per sq.yd. Noted June 28.

Minn., Duluth—St. Louis Co. received low bid scarifying, rolling and surfacing 1 mi. 11th Rd. from General Contr. Co., 1254 Plymouth Bldg., Minneapolis, $20,000.

★**Minn., Gilbert**—(Official)—Village Trustees let contract resurfacing 15,000 sq.yd. streets, warrenite, to General Contg. Co., 1254 Plymouth Bldg., Minneapolis.

★**Minn., Mankato**—(Official)—Blue Earth Co. let contract graveling 4½ mi. Mapleton Rd. to M. E. Runke, Mapleton. Noted Sept. 6.

★**Minn., St. Paul**—City let contract lug wood paving blocks to Kettle River Co., Minneapolis, $1.74 per sq.yd.

★**Kan., Ottawa**—City let contract, paving portion Cedar St. to N. E. Stucker, $12,308.

★**Neb., Kearney**—City Comrs. let contract paving 1st, 2nd and 5th Aves., 23rd and 24th Sts., to Union Paving and Constr. Co., St. Joseph, Mo., $1.67 per sq.yd. Noted June 14.

★**Mo., Joplin**—City let contract resurfacing 5235 sq.yd. Wall St., brick and 4845 ft. 5th St. to Spooner Road Oil Co., 802 Chestnut Ave. Noted Aug. 9.

★**Mo., Kansas City**—(Official)—Bd. Park Comrs. let contract paving portion Paseo Rd. to McTernan Halpin, 25th and Grand Ave., $1.27 per sq.yd. Noted Sept. 6.

★**Mo., Kennett**—City let contract improving portions Washington Ave. and College St., involving 15,568 sq.yd. paving, 12,814 lin.ft. curbing, 1444 lin.ft. 6-, 10-, 36-in. sewer pipe, 3700 cu.yd. grading and 600 lin.ft. concrete headers to Carmean & Workman, Kennett.

★**Mo., St. Joseph**—City let contract paving portion King Hill Ave. to Metropolitan Paving Co., 7th and Clive Sts. Noted Sept. 13.

★**Ark., Arkadelphia** — City let contract macadamizing Main St. to Harding Constr. Co., Arkadelphia, $10,000.

★**Okla., Ardmore**—City let contract to Ardmore Constr. Co., Ardmore, paving A St., $14,557, F St., $16,445, and D St., $14,940.

Streets and Roads (Continued)

★Wash., Ferndale—City let contract paving 3rd and other streets to C. Lind, Bellingham. $15,214.

Wash., Seattle—King Co. Comrs. received low bids building Auburn-Enumclaw Highway No. 11-C from A. L. Clark Co., c/o Washington Paving Co., L. C. Smith Bldg., $44,752; H. J. Kaiser, 312 Colby Bldg., Everett, $46,000. Noted Aug. 23.

★Wash., Seattle—City let contract paving Elliott Ave. to Superior Constr. Co., 1642 Lane St., Seattle. About $11,057. Noted Sept. 6.

★Oregon—State Highway Comn., Salem, let contract building 3 sections State Highway, Douglas Co. as follows: 10 mi. from Oakland to Yoncalla to Warren Constr. Co., Journal Bldg., Portland, $94,905; from Comstock to Leona, Hall & Solium, Eugene, $57,946; Leona to Lane Co. line, S. S. Schell, Roseburg, $26,787. Noted Aug. 30.

★Ore., Astoria—City let contract paving portion Franklin Ave. to Birch & Jackson, Astoria, $12,500. Noted Sept. 6.

Ore., Portland — City received low bids building streets, Rose City Park Dist., gravel-bitulithic, from Warren Constr. Co., Journal Bldg., Portland, $20,391 and O. Huber, Sherlock Bldg., $21,231.

California — (Official) — State Highway received low bids grading 10.8 mi. highway in Shasta Co., from Holland Constr. Co., Granger Bldg., San Diego, $27,642; W. M. Ledbetter, Pacific Electric Bldg., Los Angeles, $25,458; C. L. Hyde Constr. Co., Spreckes Bldg., San Diego, $27,335; grading 4.5 mi. in San Diego Co., Palmer & McBryde, Hooker & Lent Bldg., San Francisco, $59,541; Richard Rothwell, Los Angeles, $90,777; Tieslau Bros., San Francisco, $61,304. Noted Aug. 23.

California—State Highway Comn., Sacramento, received low bids 7.2 mi. grading in Humboldt Co. from A. Robinson and R. R. Smith, Fortuna. About $48,407. Noted Aug. 30.

★Cal., Long Beach—Bd. Pub. Wks. let contract improving 5th and Elm Sts. to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles; grading, 13.9c. per sq.ft., curbing, 35c. per lin.ft., guttering 23c. per sq.ft., sidewalks, 12c. per sq.ft. and pipes and culverts at $1000. Noted Sept. 6.

★Cal., San Bruno—Bd. Trustees let contract for street work to Chas. J. Lindgren, Burlingame. About $43,238.

Cal., San Jose—Santa Clara Co. received low bids improving Bodfish Mill Rd. from Kunze Contg. Co., $45,596; Spring Constr. Co., Solano and Colusa Sts., Berkeley, $47,230; F. R. Ritchie, Sharon Bldg., San Francisco, $48,800. Santa Clara and Alviso Rd., Raisch Improv. Co., Underwood Bldg., San Francisco, $45,470, topeka, $52,000, warrenite; F. R. Ritchie, Sharon Bldg., San Francisco, $46,500, topeka, $49,890, warrenite. Noted Aug. 30.

★Cal., Santa Barbara—City let contract 128,660 sq.ft. warrenite paving, 4488 lin.ft. cement curbs, 32,238 sq.ft. cement walk, 19,236 sq.ft. cement gutter, 5 catch basins and sprinkler system in State St. to Fairchild-Gilmore-Wilton Co. Pacific Electric Bldg., Los Angeles, $37,834; 109,989 sq.ft. asphalt paving, 1383 lin.ft. cement curbs, 16,122 sq.ft. cement gutter and 500 lin.ft. 18-in. vitr. pipe, etc. in De La Vina St. to G. R. Curtis, 2440 East 26th St., Los Angeles, $24,127. Noted Aug. 23.

★Cal., Vallejo—City let contract improving streets in central section of city to Worswick Constr. Co., Vallejo, $80,294.

Cal., Ventura—Bd. Superv. Ventura Co. paving on Telegraph and Nordhoff Rds. received low bid 1,193,000 sq.ft. concrete from Rooney-Wyckoff Co., Consolidated Realty Bldg., Los Angeles, $22,667. Noted Aug. 30.

★Cal., Yreka—Siskiyou Co. let contract building 4 mi. Forest-House-Etna Rd. to A. Anderson, Yreka, $11,800.

★Que., Shawenegan Falls—City let contract grading La Grande route to J. D. Jacob, Shawenegan Falls, $18,120.

★Que., Shawenegan Falls—City let contract building sidewalks to Napoleon Lapointe, $6250; O. Ricard, $5290; A. Giguere, $4700.

★Que., Three Rivers—City let contract laying 12,000 cu.yd. concrete pavement to Dallaire & Pothier, c/o Z. Lamber, city engr. About $33,600. Noted July 26.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Massachusetts—New York, New Haven & Hartford R.R. plans to widen and improve South Boston cut. About $1,000,000. E. Gagel, New Haven, ch. engr.

Florida—Jacksonville & Seashore Electric Asosciation plans to build 25-mi. line from Jacksonville to seashore, via proposed new highway bridge over St. Johns River, St. Elmo. W. Acosta, Herkimer Bldg., Jacksonville, secy.

Kentucky—Black Mountain R.R., recently incorporated with $200,000 capital stock, plans to build 10-mi. line from Pineville to confluence of Puckett's Creek and Chunk Lick Branch in Harlan, to tap coal fields of Bell and Harlan Cos. J. O. Watson, Fidelity Bldg., Fairmount, W. Va., M. C. Spratt, Buffalo, and J. S. Lambert, Fredonia, N. Y., incorporators.

Minnesota—Cuyuna Southern Ry., recently incorporated with $100,000 capital stock, plans to build line from Deer Wood to Mississippi River, St. Paul. C. Adams, Deer Wood, pres.

Montana—Northern Pacific R.R. plans to build 28-mi. line from Rapelje to Hesper, to be known as Lake Basin Branch. H. E. Stevens, St. Paul, ch. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Kentucky—Illinois Central R.R. let contract rebuilding lines in Paducah to G. W. Katterjohn, Paducah, $24,000.

★Montana—Great Northern Ry. let contract grading and double-tracking 26 mi. between Cut Bank and Blackfoot to Porter Bros., Spokane, $100,000.

★Washington—Chicago, Milwaukee & St. Paul R.R. let contract building 5½-mi. spur from Greendale to American Lake cantonment, Camp Lewis, to C. Matson & Son, Tacoma, $80,000.

EXCAVATION AND DREDGING

Proposed Work

Mich., Grand Rapids—Drainage—Comrs. Kent Co., Grand Rapids, Iona Co., Ionia and Barry Co., Hastings will soon receive bids building Coldwater River drain, Kent Co., about 18 mi. H. B. Patterson, drainage comr.

Minn., Duluth—Ditch—St. Louis Co. soon receives bids building Co. Ditch No. 11, Canosin region. About $12,800. O. Haldin, co. aud.

Minn., Ivanhoe —(Official)— Ditch—Lincoln Co. sold $50,000 bonds to build Ditch No. 30 and $65,000 for Ditch No. 35. K. A. Hansen, co. aud. Noted Sept. 6.

Ark., Jonesboro—Drainage—Cache River D. D. plans to build main ditch, 25 mi. long, 125 ft. wide, 30-mi. laterals, 25 to 45 ft. wide, to drain 110,000 acres, Craighead, Lawrence and Jackson Cos. J. R. Rhyme, Corning, engr.

Ore., Grants Pass—Irrigation—Grants Pass Irrigation Dist. election Oct. 4 to vote on $290,000 bond issue to install system for district covering 5250 acres, involving 35-mi. main canal, laterals, flumes, tunnels, etc. G. A. Hamilton, secy. Noted June 28.

Ore., Medford—Irrigation—Talent Irrigation Dist. voted $600,000 bonds for waterworks system from Hyatt Prairie source of supply in Cascade Mts., near Green Springs.

Cal., Oakdale—Canals—Oakdale Irrigation Dist. plans to spend $60,000 to concrete canals and replace flume.

BIDS DESIRED

Miss., Clarksdale—Drainage—Until Oct. 2, by Coahoma Co. Drainage Comn., cleaning and repairing 16 mi. canals, involving 170,000 cu.yd. excava. Hopsons Bayou D. D. L. W. Mashburn, engr.

Ind., Muncie—(Official) — Ditch — Until Sept. 28, by Delaware Co., building William R. Shirk Ditch No. 290, involving 42,878 cu.yd. excava., 1000 ft. 14-in. and 2300 ft. 18-in. shale tile. Address O. G. Weir, Anthony Blk.

Ia., Storm Lake—Drainage—Until Sept. 25 by Bd. Supervs., Buena Vista Co., building and improving D. D. No. 106, involving 58,800 cu.yd. excavation and 141,223 ft. 5 to 38-in. tile. W. W. Bennett, aud.

Minn., Anoka—Ditch—Until Oct. 3, by Anoka Co., building Co. Ditch No. 60, 16,100 ft. long, branches 12,840 ft. long, cost $28,371; repairing Co. Ditch No. 41, involving 68,646 cu.yd. excavation, $18,178. C. S. Piper, co. aud.

Minn., Fairmont—Ditch—Until Sept. 25 by Martin Co. building Judicial Ditch No. 77, involving 29,325 ft. 6- to 26-in. tile. About $22,649. H. C. Nolte, co. aud.

Minn., Le Sueur—Ditch—Until Oct. 1, by T. F. Dunn, Aud. Le Sueur Co., building Co. Ditch No. 45, involving 156,545 cu.yd. excavation. About $22,830.

Minn., Slayton —(Official)— Ditch—Until Sept. 27 by E. V. O'Brien, aud. Murray Co. building Judicial Ditch No. 19, involving 101,000 ft. 6- to 26-in. tile, cost, $44,542; Co. Ditch No. 6, 32,700 ft. 6- to 28-in. tile, $15,315.

Minn., Slayton —(Official)— Ditch—Until Sept. 28 by E. V. O'Brien, aud Murray Co. building Judicial Ditch No. 24, Murray and Cottonwood Cos., involving 9985 ft. 6- to 18-in. tile. Cost, $3533; Co. Ditch No. 54, 25,800 ft. 6- to 18-in. tile, $6776.

Ont., Port Maitland — Dredging — Until Sept. 25, by R. C. Desrochers, secy. Bd. Pub. Wks., Ottawa, dredging Grand River Channel.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., New York—(Official)—Dredging—City let contract dredging slips, foot 55th, 56th and 57th Sts. to Coastwise Dredging Co., 17 Battery Pl., $92,400. Noted Sept. 6.

★Tenn., Trenton — Canal — 4th Dist. Drainage Comn. let contract 17 mi. drainage canal, Gibson, Crockett and Madison Cos., to N. C. McGinnis & Co., Exch. Bldg., Memphis, $153,000.

★Ia., Hampton —(Official)— Drainage—Franklin Co. let contracts building drainage districts, (a) labor, (b) material as follows: Lehigh Sewer Pipe and Tile Co., Ft. Dodge, D. D. No. 52, (a) $24,215; N. K. Pederson, Coulter, (b) $10,480; Leheigh Clay Products Co., Leheigh, D. D. No. 54 (a) $12,487, No. 55, (a) $34,699; J. P. Zander, Coulter No. 54, (b) $7211; A. A. Hamrey, Forest City, No. 55, (b) $14,917; Hawkeye Constr. Co., Webster City, D. D. No. 58, (a) $24,490; James Slattery, Dows, (b) $15,800. Noted Aug. 30.

★Ia., Webster City—Drainage—Hamilton and Webster Cos., Ft. Dodge, let contract tile for joint drain No. 204-248 to Natl. Sewer Pipe Co., Webster City, $10,138; labor to H. A. Tegat, $5995.

★Minn., Walker — (Official) — Ditch — Comrs. Cass Co. let contract Judicial Ditch No. 6, requiring 70,234 cu.yd. excavation on main ditch 18,724 cu.yd. on laterals, culverts, bridges, etc., to Road Constr. Co., Grand Rapids, Wis., 11.95c. per cu.yd. Noted Sept. 6.

INDUSTRIAL WORKS

Proposed Work

Mass., Boston—Coleman & Gilbert, 351 Huntington Ave., plan 3-story, 91 x 110-ft. brick and concrete garage, Boylston and Ipswich Sts. About $150,000.

R. I., Providence — Packard Motor Car Co., 189 Auburn St., rejected bids, 2-story, 189 x 200-ft. garage and salesroom. About $175,000. Albert Kahn and Ernest Wilby, 58 West Lafayette Blvd. Detroit, Mich., archts.

N. Y., Dunkirk—Atlas Crucible Steel Co. plans rolling mill, machine shop, storeroom, transformer station, laboratory, time office and other additions.

N. Y., New York—Falkenau & Hamershlag, Inc., 51 East 42nd St., had plans prepared by S. Katz, 405 Lexington Ave., for 2-story, 100 x 149-ft. brick garage and store. About $110,000.

N. Y., S. I., Clifton—Pouch Terminal Co., Clifton, had plans prepared by Concrete Steel Co., 42 Bway., New York City, for 7-story factory.

Pa., Phila.—American Ice Co., 6th St., plans 2-story ice-manufacturing plant, 10th and Callowhill Sts. About $250,000.

Pa., Phila.—Crew-Levick Co., Land Title Bldg., plans 1-story, 72 x 72-ft. dry house; 1-story, 45 x 70-ft. workhouse, 2-story, 72 x 96-ft. cooper shop; 2-story, 30 x 72-ft. pump and tank house and 2-story, 70 x 325-ft. paint shop on Pettys Island, Delaware River.

Industrial Works (Continued)

Pa., **Phila.**—T. Cusack & Co., 18th and Nonble Sts., having plans prepared by M. H. Dickinson, archt., Empire Bldg., 1- and 2-story, 80x200-ft. factory.

Pa., **Pittsburgh**—D. Kellerman, Pile St., plans 3-story brick warehouse. About $70,000.

Del., **Wilmington**—Wilmington & Philadelphia Traction Co., 7th and Orange Sts., plans 1-story, 54 x 64-ft. rein.-con. addition to plant at 18th and Buena Vista Sts. About $55,000.

Ky., **Pineville**—Detroit Elk Co. plans portland cement plant. About $1,000,000. C. C. Winters, Mancourt-Winters Coal Co., Dime Bank Bldg., Detroit, interested.

O., Akron—L. G. Federman, 86 South Main St., had plans prepared by Fichter & Brooker, archts., 2nd Natl. Bank Bldg., for 4-story, 39 x 92-ft. warehouse, 44 South Summit St.

O., Akron — Northern Ohio Traction & Light Co., Hamilton Bldg., soon lets contract boiler house, warehouse, meter laboratory and club house. Franz Warner, 718 Hippodrome Annex Bldg., Cleveland, archt.

O., Akron—Williams Fdry. & Machine Co., 60 Cherry St., plans 5-story, 50x275-ft. addition.

O., Cleveland—City Council plans to issue $3,300,000 bonds for ice plant, building improvements, at Warrensville Farm, park extension and improvements to high level bridge.

O., Cleveland — National Lamp Works, 1131 East 152nd St., had plans prepared by G. H. Johnson, Citizens Bldg., for warehouse and factory. About $160,000.

O., Dayton—Cooper Medicine Co., 309 East 1st St., had plans prepared for 5-story, 50x196-ft. factory. About $175,000. Pretzinger & Musselman, 1155 Riebold Bldg., archts., will receive bids.

O., Sandusky—Lake Erie Dry Dock & Eng. Co., incorporated with $1,600,000 capital stock, plans factory here. C. Bright, 299 Bway., New York City, and others, interested.

Mich., Grand Rapids—E. B. Hayes Axle Co., 571 High St., Oshkosh, Wis., plans 100x400-ft. factory near Fuller Sta. About $100,000.

Mich., Muskegon—People's Mill Co. plans to rebuild plant recently destroyed by fire with loss of $150,000. M. Frost, pres.

Wis., Green Bay—Oneida Motor Truck Co. plans 2-story, 125x475 ft. brick and steel factory. About $55,000. Foeller & Schober, 123 North Washington St., archts.

Wis., Milwaukee—American Autobody Co., 531 Caswell Blk., plans 4-story, 200x300-ft. rein.-con. factory. About $80,000.

Wis., Milwaukee—Weyenberg Shoe Co., Hubbard St. and Reservoir Ave., plans 7-story, 50 x 200-ft. addition and 24 x 60-ft. wing. H. J. Esser, Camp Bldg., engr.

Wis., Sheboygan—Northern Furniture Co., South Waten and North Jersey Sts., plans 6-story, concrete addition to factory. About $75,000.

Ia., Dubuque—Sterns Tire & Tube Co. of Iowa plans 2-story, 100 x 150-ft. rubber factory. About $80,000.

Ia., Waterloo—Union Mills having plans prepared by M. B. Cleveland, archt., 1st Natl. Bank Bldg., brick and rein.-con. warehouse and grain-drying plant. About $100,000.

Minn., Minneapolis—Albert Lea Sprayer Co., 309 West Main St., plans 5-story, 54x110-ft. factory.

Minn., Minneapolis—Foster Robe & Tanning Co. plans 3-story, 42 x 35 ft. tannery and fur factory. About $55,000.

Minn., Minneapolis—B. F. Nelson Mfg. Co., 501 N. E. East St., plans 3-story, 38 x 46-ft. brick and rein.-con. paper mill. About $50,000.

Minn., Minneapolis—Republic Creosoting Co., 822 Plymouth Bldg., plans 3-story, 100 x 150-ft. rein.-con. and brick factory, power house and office. About $70,000.

Mo., St. Louis — Montesano Chemical Works, 1800 South 2nd St., St. Louis, plans new plant. About $750,000.

Idaho, Idaho Falls—East Idaho Gas Co. plans initial expenditure of $60,000 and ultimate expenditure of $125,000 for gas plant here. W. D. Wilcox, pres.

Cal., Bay Point—Pacific Coast Shipbuilding Co., 175 Stewart St., San Francisco, recently organized, plans steel shipbuilding plant near Bay Point. About $1,500,000. H. T. Scott, mgr.

Ont., Markham—Canada Cereal Co. receives bids about Mar. 15 for flour mill. About $100,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., South Boston—(Boston P. O.)—Boston Wharf Co., 259 Summer St., let contract 6-story, 90 x 128-ft. brick warehouse on Farnsworth St., to F. C. Alexander, 294 Washington St.

★N. Y., Buffalo—Ericson Mfg. Co., 1100 Military Rd., let contract brick and steel addition to J. W. Cowper Co., Fidelity Bldg., $50,000.

★N. Y., Syracuse—Continental Can Co., 1016 East Water St., let contract factory, East Water St. and University Ave., to Thompson & Binger, Inc., 280 Madison Ave., New York City, $60,000.

★N. J., East Orange—Crocker Wheeler Co., Ampere, let contract addition to plant to American Concrete Steel Co., 27 Clinton St., Newark, $165,000.

★Pa., Phila. — Lanston Monotype Co., 25th and Locust Sts., let contract 5-story, 44 x 122-ft. plant to W. Steele & Sons, 1600 Arch St., $85,000. Noted Aug. 16.

★Pa., Phila.—West Phila. Stock Yards Co., Race and 13th Sts., let contract 3-story, 75x135-ft. fireproof factory to W. C. Doll & Co., Abbott Bldg., $138,000.

★Pa., Phila—T. Wharton, Graus St., let contract 1-story, 81 x 242-ft. factory and office building to Crowell-Lundoff-Little Constr. Co., 52nd and Grays Ave., Cleveland, $60,000.

★O., Cleveland—Lang Body Co., Garfield Bldg., let contract brick and steel factory and office, 3086 West 106th St. to Fath Constr. Co., 5103 Euclid Ave. About $75,000.

★O., Cleveland — Morgan Lithographing Co., St. Clair Ave., let contract 3-story factory, Payne Ave. and East 17th St., to Crowell-Lunduff-Little Constr. Co., 1951 East 57th St., $200,000. Noted Aug. 9.

O., Columbus—Bd. Trustees, State University, received low bid power plant to be built at University from E. H. Latham, Columbus Savings & Trust Bldg., $85,159.

★O., Columbus—Commercial Improv. Co., 3rd and Spring Sts., let contract 1- and 2-story fireproof garage and warehouse to E. Elford, 104 North 3rd St., $50,000.

★O., Kent—Mason Tire & Rubber Co. let contract 2-story, brick and concrete factory to A. A. Lane Constr. Co., 820 Columbia Bldg., Cleveland, $100,000. Noted Sept. 13.

★Ill., Chicago—Chicago & Northwestern R.R. let contract 1-story brick shops, 800 North Crawford Ave., to C. W. Gindell Co., 3333 South La Salle St. About $100,000.

★Wis., Milwaukee — International Harvester Co. of America, 606 South Michigan Ave., Chicago, let contract 80 x 240-ft. core building, 784 Park St., to Dahlman Constr. Co., 912 Majestic Bldg., Milwaukee, $100,000.

★Ia., Cedar Rapids—Quaker Oats Co. let contract, 6-story, brick and rein.-con. warehouse and storage tanks to Leonard Constr. Co., 332 South Michigan St., Chicago. About $125,000. Noted June 21.

★Ia., Des Moines — Hubbell Bldg. Co., Hubbell Bldg., let contract brick garage, to A. H. Neuman, Hubbell Bldg. About $65,000.

★Ia., Sioux City—Lessenich Estate let contract, 3-story, brick and rein.-conc. automobile sales building, 5th and Pearl Sts., to B. E. Short, 420 Court St. About $65,943. Noted Sept. 6.

★Minn., South St. Paul—Armour & Co., 307 West South Water St., Chicago, let contract packing plant to Blome-Sinek Constr. Co., City Hall Sq. Bldg., $5,000,000.

★N. B., St. John—City let contract dock shed No. 5 to Kane & Ring, 85½ Prince William St., $50,000.

★Ont., London — Battle Creek Toasted Corn Flakes Co., Dundas St., let contract addition to plant to Archibald & Holmes, Excelsior Life Bldg., Toronto, $75,000.

★Ont., Tillsonburg—Maple Leaf Harvest Tool Co. let contract factory to A. E. Ponsford, 605 Talbot St., St. Thomas, $50,000.

BUILDINGS

Proposed Work

Mass., Ayer—Bathing Pavilion and Recreation Hall—Camp Devens Comn. on Training Camp Activity plans. About $50,000. G. A. Morrison, 201 Devonshire St., Boston, chn. Parker, Thomas & Rice, 110 State St., Boston, archts.

Mass., Cambridge—High and Latin School—Bd. Educ. plans addition and alteration. About $100,000. Newhall & Blevins, 9 Park St., Boston, archts.

Mass., Middleton—(Official)—Hospital—Essex Co. Comrs., Court House, Salem, will receive bids in November for 5 2-story buildings. J. H. Bickford, 110 State St., Boston, archt. Noted Sept. 6.

Conn., Norwich—Ward—State Hospital for Insane plans, 3-story, 40 x 285 ft. About $130,000. T. E. Erdman, supt. Cudworth & Thompson, Thayer Bldg., archts.

Conn., South Norwalk—School—Bd. Educ. had plans prepared by W. H. Beers, archt., 17 Madison Ave., New York City, 2-story, 50 x 100 ft. About $50,000.

N. Y., Buffalo—Y. M. C. A. plans 4-story, 105 x 182-ft. building, Auburn Ave. and Grand St. About $250,000. W. E. Holler, secy.

N. Y., New York—Store and Theater—S. Bloom plans, brick and terra cotta, 215-223 West 42nd St. P. R. Pereira and E. De Rosa, 150 Nassau St., archts.

N. Y., New York—Theater ana Office—J. J. Schubert, 225 West 44th St., had plans prepared by H. J. Knapp, archt., 116 East 16th St. About $50,000. Noted Aug. 30.

N. Y., Rochester—Church and Parish House—Lutheran Congregation of the Redeemer plans, 2-story. About $90,000. A. A. Ritcher, 31 North 6th St., Reading, Pa., archt.

N. Y., Syracuse — Theater, Store and Office—Keith & Albee, 1564 Bway., New York City, plan, 10-story, 118 x 147 ft. and 72 x 120 ft. About $500,000. W. T. Lamb, 644 8th Ave., New York City, soon receives bids.

N. J., Red Bank—School—Bd. Educ. plans 2-story. About $60,000. F. M. Truex, 1170 Bway., New York City, archt.

N. J., Woodbury — School — State Bd. Educ. plans to build State Normal School, Gloucester Co. About $500,000. F. H. Bent, Trenton, state archt.

Pa., Fairview—Wards, Etc.—State Commission for Treatment of Criminal Insane soon receives bids wards and connecting corridors at hospital. About $80,000. J. M. Shirk, 421 Chestnut St., Phila., archt. Noted July 26.

Pa., Lebanon—High School—City School Dist. to sell $250,000 bonds Oct. 1st, to build high school.

Pa., McKeesport—Clubhouse—Y. M. C. A. acquired Dunshee property, Ringgold and Sinclair Sts., and plans to build. About $300,000.

Pa., Pittsburgh—Church—Fourth Methodist Protestant Congregation had plans prepared, Frankstown Ave. and Bennett St. About $100,000. C. M. Lippincott, pastor.

Pa., Uniontown—Memorial—Grand Jury plans Soldiers' and Sailors' Memorial. About $150,000.

W. Va., Huntington—Bank and Office—Union Bank & Trust Co. plans, 10-story, rein.-con., 4th Ave. and 9th St. About $100,000 to $200,000. A. F. Dickey, Huntington, arch.

O., Akron—School—Bd. Educ. lets contract about Oct. 20 for addition. About $90,000. T. R. Rodley, Cottage Pl., archt.

O., Cleveland—Auditorium and Convention Hall—City having plans prepared, 1-story, 270x430-ft. About $2,500,000. F. A. Betz, city archt. Walker & Weeks, 1900 Euclid Bldg., cons. archts.

O., Cleveland — Bathhouse — City having plans prepared, to be built in Gordon Park. About $350,000. A. Betz, city archt.

O., Cleveland—Market—J. P. Stotter Co., Leader-News Bldg., had plans prepared by S. H. Weis, archt., 1032 Schofield Bldg., 2-story, 100 x 200 ft., Clifton Blvd. and West 117th St. About $125,000.

O., Cleveland—School—Bd. Educ. plans addition to Jennings School, North hill. About $150,000.

O., Cleveland — School — Hebrew School and Institute, 2500 East 55th St., plans new school. About $100,000. D. Gara, chmn.

O., Cleveland—Shelter and Refreshment—City plans, Wade Park, on Euclid Ave. About $60,000. F. H. Betz, 604 City Hall, city archt.

O., Columbus—Y. M. C. A. had plans prepared building at Spring and 5th Sts. About $100,000. J. W. Pontius, gen. secy.

Buildings (Continued)

O., Deshler—Grade and High School—Bd. Educ. plans, 2-story, 70 x 117 ft. About $60,000. C. W. Beelman, 812 2nd Natl. Bank Bldg., Toledo, archt.

O., East Cleveland—(Cleveland P. O.)—Hospital—Village sold $200,000 bonds for 3-story, steel, concrete and stone. C. Ammerman, Williamson Bldg., clk. W. Hirsh, 1392 Swetland Bldg., archt.

O., Ironton—Hotel Auditorium and Store—Ironton Hotel Co., c/o A. H. Harting, had plans prepared by Howard & Merriam, archts., Citizens Bank Bldg., Columbus, 5-story, 132x132-ft. About $125,000.

Mich., Detroit—Schools—Bd. Educ. plans additions to following schools: Russel, $160,000; Greusel, $120,000; Stephens, $100,000; Columbian, $160,000; Hely, $50,000; School for Crippled Children, Russell and Catherine Sts., $100,000.

Mich., Port Huron—Armory—Chamber of Commerce plans. About $60,000.

Ill., Abington—School—Bd. Educ. soon lets contract, 2-story. About $50,000. M. S. Martin, Hannibal Bldg., archt.

Ill., Chicago—Hospital—Illinois Steel Co. plans, 1-story, at South Works. About $100,000. E. J. Buffington, 208 South La Salle St., pres. Schmid, Garden & Martin, archts., 104 South Michigan Ave., soon receives bids.

Ill., Chicago—Hospital—West End Hospital plans, 4-story, 34 x 50 ft. About $50,000. B. H. Breakstone, 30 North Michigan Ave., supt. D. Saul Klafter, archt., 64 West Randolph St., soon receives bids.

Ill., Chicago—Theater, Store and Office—Peoples Theater Co., 4717 South Ashland Ave., plans, 2-story. About $250,000. C. W. & G. L. Rapp, archts., 69 West Washington St., soon receive bids.

Wis., Milwaukee — Church — Evangelical Lutheran Bethany Congregation plans, 68 x 100-ft. brick. About $50,000.

Wis., Wausau—School—Bd. Educ. plans, 2-story, 197 x 200-ft. addition to Longfellow grade school. About $50,000. Harvey Swarthout, 214 3rd St., archt.

Ia., Dubuque—Auditorium and Gymnasium—Sisters of Charity, B. V. M., 1018-26 South Seeley Ave., plan. About $75,000.

Ia., Earlham—School—Bd. Educ. plans, 2-story. About $125,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., Des Moines, archts.

Ia., Sioux City—Hospital—Samaritan Hospital Assn., c/o W. P. Manley, chn., having plans prepared by Beuttler & Arnold, archts., 609 Security Bldg., 3-story, brick, rein.-con. and steel. About $200,000.

Ia., Spirit Lake—Hotel and Administration—Knight Templars of Iowa, c/o C. Huttenlocke, pres. bldg. com., Des Moines, and D. L. Clark, Newton, having plans prepared by C. A. Dieman & Co., archts., 408 Granby Bldg., Cedar Rapids, 3-story, 32x 360-ft., stucco and rein.-con. About $80,000.

Ia., Waverly—Dormitory and Administration—Evangelical Lutheran Synod of Iowa plans addition to Wartburg Seminary. About $100,000.

Minn., Anoka—Chapel and Assembly—State Bd. Control had plans prepared by C. H. Johnston, archt., 715 Capital Bank Bldg., St. Paul, 2-story, 50 x 120 ft., as addition to State Asylum. About $75,000.

Minn., Duluth — Office — Interstate Express & Transfer Co., 206 Alworth Bldg., plans 50 x 100-ft. About $50,000.

Kan., Lawrence—Liberal Arts—State University soon lets contract, 4-story, terra cotta and rein.-con. About $225,000. C. H. Chandler, State House, Topeka, archt.

Kan., Pittsburg—Normal School—State plans, 3-story, brick, terra cotta, stone and rein.-con. About $200,000. C. H. Chandler, State House, Topeka, archt.

N. D., Bismarck—Historical Museum—North Dakota Historical Society Bldg. Assn. plans. About $50,000. Curator Gilmore, State Historical Museum, interested.

Mont., Billings—Hotel—Billings Brewing Co. soon lets contract, 3-story, Montana Ave. and 24th St. About $50,000.

Mont., Helena — Dormitory —Montana Wesleyan University plans girls' dormitory. About $50,000.

Mo., St. Louis—Hotel—Federal Hotel Co. plans, 8th and Locust St. About $200,000.

Mo., St. Louis—Temple—Masonic Lodge plans. About $500,000.

Tex., Waco—Hotel—T. G. Dockery, 1627 North 5th St., having plans prepared by R. E. Lane, archt., Providence Bldg., 4-story, 70 x 105-ft. About $60,000.

Utah, Beaver — (Official) — Beaver Co. election Sept. 25 to vote on $125,000 bonds to build schools. Nelson & Ashworth, archts., F. & M. Bank Bldg., Provo City, soon receives bids. Noted Aug. 30.

Wash., Olympia—High School—Bd. Educ. having plans prepared by Heath & Gove, archts., National Realty Bldg., Tacoma, and J. Wohleb, archt., Talcott Bldg., 3-story, 12th and 13th Sts. About $100,000.

Wash., Tacoma—High School—Bd. Educ. having plans prepared by Heath & Gove, archts., Natl. Realty Bldg., and J. Wohleb, Talcott Bldg., Olympia. About $100,000.

Ore., Portland — Office — Failing Estate, 5th and Alder St., having plans prepared by Whidden & Lewis, archts., Wilcox Bldg., for alterations. About $200,000.

Cal., Los Angeles—Bank and Office—J. Benton Van Nuys having plans prepared by Morgan, Walls & Morgan, archts., Van Nuys Bldg., 8-story, 60 x 155-ft. rein.-con. brick and terra cotta, between 7th and 8th Sts.

Cal., Los Angeles—Office—A. B. Cohn, 219 South Main St., had plans prepared by W. S. Garrett, archt., Currier Bldg., 13-story, 50x58-ft., rein.-con., 940 South B'way.

Cal., Sacramento — Temple — Masonic Temple Assn. plans, 3-story, steel and concrete, 12th and J Sts. About $297,887.

Cal., San Diego—City Hall—City plans to build. H. Albright, San Diego, archt.

BIDS DESIRED

N. Y., Castleton—High School—Until Oct. 2, by Bd. Educ., 2-story, 42 x 100 ft. About $50,000. Loth & White, 130 State St., Albany, archts.

Ga., Savannah—School—Until Oct. 5, by A. Dorsey, gov., State Capitol, for negro agricultural, industrial and normal school.

Ind., Lafayette — Hospital — (Official)—Until Oct. 10, by R. E. Schmidt, Garden & Martin, archts., 104 South Michigan Ave., 4-story, rein.-con. About $100,000. Noted Sept. 6.

S. D., Eden — (Official) — Church—Until Sept. 30, by Roman Congregation, 1- and 2-story, 50 x 140-ft. and 32 x 34-ft. church and parish house. About $70,000. W. Eckle, pastor. A. Dohman, 1st Natl. Bank Bldg., archt. Noted Aug. 30.

Cal., San Francisco—(Official)—Hotel—Until Oct. 1, by Smith & Stewart, archts., Claus Spreckels Bldg., building 7-story rein.-con. addition to Ramona Hotel, Ellis St. About $60,000. Noted Aug. 30.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Me., Portland—Theater—Nickel Amusement Co., 565 Congress St., let contract 2-story, 129 x 132-ft., brick and steel, to Forgione & Romano, Fidelity Bldg., $100,000. Noted Aug. 23.

★Mass., Mattapan—Nurses' Home—Boston State Hospital let contract, 3-story, Harvard St., to R. D. Kimball Co., 6 Beacon St., Boston. $70,000. Noted Aug. 9.

Mass., Springfield—School—Bd. Educ. received low bid, Washington and Woodlawn Sts., from L. S. Wood, 14 Stockbridge St., Springfield. About $150,000.

★N. Y., Albany—Church—First Congregational Church let contract, 1½-story, 65 x 96 ft., to Wm. Sayles & Son, 266 Hudson Ave. About $60,000.

N. Y., Albany—Laboratory—H. M. Biggs, comr. state health dept., received low bids, from Feeney & Sheehan Bldg. Co., 164 Montgomery St. About $127,000. Noted Aug. 23.

★N. Y., Brooklyn — Office — New York Dock Co., 44 Whitehall St., New York City, let contract, 3-story rein.-con. Freeman and Joralemon Sts. to Turner Constr. Co., 242 Madison Ave., New York City.

★N. Y., New York—Medical School—Columbia University, c/o N. M. Butler, 116th St. and Bway., let contract, 7-story, 49 x 358 ft., brick, to L. P. Fluhrer, 200 West 42nd St. About $50,000.

★N. Y., Rochester—Junior High School—Bd. Educ. let contract, 3-story, 226 x 34-ft., to Goosline & Swan Constr. Co., Powers Blk. Noted Aug. 23.

★Pa., Phila.—Freight House—Phila. & Reading R.R. let contract 1-story, brick and steel, Noble St., to A. L. Carhart, Hale Bldg., $50,000.

★Pa., Phila.—Hospital—Osteopathic Hospital let contract alteration and addition, 19th and Spring Gardens, to J. N. Gill & Co., Otis Bldg., $60,000.

★Miss., Jackson—Schools—Bd. Trustees let contract for 4 of 66 buildings to be built at Mississippi Training and Industrial School, to Dabbs & Wetmore, 220 2nd St., Meridian, $55,000.

★O., Cleveland — Freight Terminal — Cleveland & Youngstown R.R. let contract, Orange Ave. and East 12th St., to Walsh Constr. Co., Citizens' Bldg., $675,000.

O., Lakewood—High School—Bd. Educ. received low bid, 3-story addition, from Crump Eng. Co., Leader-News Bldg., Cleveland, $500,000. Noted July 19.

★Ill., Chicago—Hotel—S. T. Cooper, 111 West Washington St., let contract, 6-story, 4647-59 Drexel Ave., to Erickson Johnson & Co., 139 North Clark St., $450,000.

★Ill., Collinsville—Miners Institute—Institute Com. let contract to H. Eberhardt, Collinsville, $77,439.

★Ia., Mingo—School—Bd. Educ. let contract, 2-story, 60 x 90 ft., brick, to W. F. Kucharo & Co., 319 Market Ave., S., Des Moines. About $50,000. Noted Aug. 16.

★Ia., Newton—School—Bd. Educ. let contract to P. R. Wells, Mason City, $85,000.

★Ia., Sergeant Bluff—School—Bd. Educ. let contract, 2-story, brick and rein.-con., to Dubel & Anderson, 514 Jackson St., Sioux City. About $75,000.

★Ia., Sioux City—Store—S. S. Kresge Co. let contract, 3-story, 40x45-ft., to Oberg-Pederson Co., 611 5th St., $150,000.

★Minn., Grand Rapids—Hospital—Itasca Co. let contract tuberculosis hospital to Everson & Utterberg, St. Paul, $50,000. Noted Apr. 12.

★Neb., Omaha — Theater and Store—Blank Realty Co., Des Moines, let contract, rebuilding, 2-story, 132 x 132 ft., to Calvin Zeigler, 904 South 25th Ave. About $150,000.

★Neb., York—High School—Bd. Educ. let contract to Olson & Johnson, 508 Montana Bldg., Missoula, Mont., $147,000.

★S. D., Vermillion—Women's Dormitory—South Dakota University let contract, 3-story, to N. Nelson, Stillwater, Minn., $115,000. Noted Aug. 9.

★Mont., Great Falls—High School—Bd. Educ. let contract junior high school to Rude & Searless, 337 Ford Bldg., $137,880. Noted June 7.

★Okla., Tulsa—Y. W. C. A. let contract 4-story, 90x136-ft., brick, terra cotta and rein.-con. building to Universal Constr. Co., 16 Ault-Kirkpatrick Bldg., $150,000. Noted Aug. 16.

★Wash., Spokane—Theater—A. Pantages let contract, rein.-con. and steel, to E. B. Newcomb, Pantages Bldg., Seattle, $150,000.

★Cal., Bakersfield—Office—J. A. Jastro let contract 2-story, 55x88-ft., hollow-tile, to Curre & Dulgar, Bakersfield, $83,453.

★Cal., Coalinga—High School—Bd. Educ. let contract to Oachen Bros., Coalinga, $80,749.

★Cal., Modesto—High School—Bd. Educ. Modesto Union High School Dist. let contract to E. E. Etherton, 502 Monadnock Bldg., San Francisco. About $136,750. Noted Aug. 2.

★Cal., Sacramento — Temple — Masonic Temple Assn. let contract, steel and rein.-con., to Mathews Constr. Co., Forum Bldg. About $297,887.

★N. S., Sydney—School—Bd. Educ. let contract, brick, Argyle St., to Chappell Bros. & Co., Ltd., 62 Brookland St., $53,000.

★Man., Emerson—Court House—City let contract, brick and stone, to Gray & Davidson, 621 Wall St., Winnipeg. About $50,000.

FEDERAL GOVERNMENT WORK

Proposed Work

N. Y., New York—Dredging—U. S. Engr., Room 710, Army Bldg., 39 Whitehall St.,

Federal Government Work (Continued)

rejected bids opened June 14, dredging Hudson River Channel, New York Harbor, as too high. Noted June 7.

N. Y., New York—Dredging—U. S. Engr., 39 Whitehall St., New York, rejected bids opened June 23, dredging Passaic River, N. J.

Pa., Franklin—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Aug. 30. Noted Sept. 6.

Pa., McKees Rocks—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Sept. 4. Work will be readvertised. Noted Sept. 13.

Pa., Phila.—Quarters for Radio Operators—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., rejected bids opened Aug. 20. Noted Aug. 30.

Pa., Pittsburgh—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids for remodeling and extension. Noted Aug. 30.

Del., Wilmington—Dredging—U. S. Engr., Old Federal Bldg., Wilmington, rejected bids opened June 4, dredging Murderkill and Mispillion Rivers. Noted May 17.

S. C., Port Royal — Buildings — Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., rejected bids opened Aug. 30. Noted Aug. 9.

Ia., Cherokee—Post Office—J. A. Wetmore superv. archt., treas. dept., Wash., rejected bids opened Aug. 22, as too high. Noted Aug. 30.

Tex., Galveston—Earthwork—U. S. Engr. Office, Galveston, rejected bids furnishing and placing fill, soil, sod and riprap at U. S. Reservation, Ft. Crockett. Noted May 31.

BIDS DESIRED

N. Y., Waterloo—Post Office—Until Oct. 28, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Pa., Phila.—Dispensary—Until Oct. 1, by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., building, at Navy Yard.

Wash., D. C.—Buildings—Until Sept. 25, by E. P. Bertholf, Capt. Commandant, U. S. Coast Guard, Wash., constructing new buildings and accessories. Coast Guard Sta. No. 166, Wash Woods, N. C.

Wash., D. C.—Hydraulic Pumps—Until Oct. 1, by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., furnishing 4 motor-driven hydraulic pumps and 2 accumulators.

Ala., Andalusia—Post Office—Until Oct. 23, by J. A. Wetmore, superv. archt., treas. dept., Wash.

La., New Orleans—Electric Traveling Crane—Until Sept. 24, by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., furnishing in machine shop.

Tenn., Memphis—Levee Work—Until Sept. 29, by Mississippi River Comn., 1st and 2nd Dists., building 1,870,000 cu.yd. earthwork, Upper St. Francis Levee Dist.; advertised in this issue.

Tenn., Memphis—(Official)—Machinery—Until Sept. 26, by Mississippi River Comn., 1st and 2nd Dists., furnishing boiler feed pump, etc.; advertised in this issue.

Ill., Mt. Carmel—Post Office—Until Oct. 26, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Tex., El Paso—Laterals—Until Oct. 15, by U. S. Rec. Ser., El Paso, building laterals, Rio Grande Project. A. P. Davis, ch. engr.; advertised in this issue.

Tex., Galveston—Rip Rap—Until Oct. 2, by U. S. Engr. Office, Galveston, furnishing and delivering rip rap at Port Aransas or Rockport, Tex.; advertised in this issue.

Cal., Bakersfield—Post Office—Until Oct. 24, by J. A. Wetmore, superv. archt., treas. dept., Wash.; advertised in this issue.

Cal., San Francisco—Wharf—Until Oct. 2, by J. A. Wetmore, superv. archt., treas. dept., Wash., building west wing of wharf, Quarantine Sta., Angel Island.

H. T., Kauhua—Mine Storage Building—Until Oct. 1, by Bureau Yards and Docks (F. R. Harris, ch.) Navy Dept., Wash., D. C., steel and frame.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Conn., New London—Power Plant Equipment—Bureau Yards and Docks, Navy Dept., Wash., received low bids from Edgemore Iron Co., Edgemore, Del., $95,308; General Electric Co., River Rd., Schenectady, N. Y., $63,200 and $94,800; Babcock & Wilcox, North American Bldg., Phila., $69,511 for boilers only.

Conn., New London—Submarine Base, Dredging, etc.—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept. Wash., received low bids building submarine base, dredging and removing piers and bulkhead, (a) price per cu.yd., (b) removing coal pier, etc., from T. A. Scott Co., Inc., 292 Pequot Ave., (a) 495c. (b) $19,700, 180 days; J. S. Packard Dredging Co., 1004 Turks Head Bldg., Providence, (a) 53c. (b) $23,900, 160 days; Morris & Cumings, 17 State St., New York City, (a) $1.30, 170 days, (b) $69,000, 90 days. Noted Aug. 30.

N. Y., Long Island City—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids (a) limestone, (b) sandstone, from P. J. Carlin Constr. Co., Dauers Pk., Brooklyn, (a) $198,800, (b) $200,800; E. Diebitsch, 383 Madison Ave., New York City (a) $210,000; C. A. Cowen Co., 30 East 42nd St., New York City, (a) $227,500, (b) $228,000. Noted Aug. 9.

★N. Y., New York—Storage Buildings—Bureau Yards and Docks, Navy Dept., Wash., let contract building 2 storage buildings to Degnon Constr. Co., 68 Hunters Pt. Ave., Long Island City. $400,000.

★N. J., Lake Denmark — Sub-surface Magazine Building—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., let contract to Jobson-Gifford Co., 30 East 42nd St., New York City, $25,250.

★Pa., Harrisburg—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract extension to post office to A. Wildman, 2206 North 3rd St., $58,200. Noted Sept. 6.

Pa., McKees Rocks—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, Sept. 4, from C. S. Smith, 5501 Centre St., Pittsburgh, $62,500; W. H. Fissell & Co., 1328 Bway., New York City, $72,497. Noted Aug. 2.

★Pa., Phila.—Extension to Quarter Masters Depot—Bureau Yards and Docks, Navy Dept. Wash., let contract to Cramp & Co., Denckla Blk., $224,700. Noted Sept. 13.

★Pa., Phila.—Heating System — Bureau Yards and Docks, Navy Dept., Wash., let contract heating system for machine and electrical shop, Navy Yard, to Mathis Bros. Co., Archer Ave. and Canal St., Chicago, $33,892. Noted Sept. 6.

★Pa., Phila.—Storehouse—Bureau Yards and Docks, Navy Dept., Wash., let contract to Cramp & Co., Denckla Bldg., $399,500.

Md., Annapolis—Dredging—Bureau Yards and Docks, Navy Dept., Wash., received low bids dredging at Naval Academy, from Maryland Dredging & Constr. Co., Fidelity Bldg., Baltimore, 35c. per cu.yd., 30 days; Dorsey & Miller Co., 420 Equitable Bldg., Baltimore, 45c. 75 days.

Wash., D. C.—Air Compressors—Bureau Yards and Docks, Navy Dept., received low bids furnishing at naval base at New London, Conn., and Charleston, S. C., from Ingersoll & Rand Co., 11 Bway., New York City, $10,242; Carroll Electric Co., 714 12th St., $14,050.

Wash., D. C.—Cement Walks—Comrs. received low bids building cement sidewalks, (a) 40,000 sq.yd. city walks, (b) 30,000 sq.yd. suburban walk, from W. F. Brenizer, 1777 Columbia Rd., (a) $1.53 per sq.yd., (b) $1.71; Cranford Paving Co., 2620 E St., (a) $1.61; (b) $1.79.

Wash., D. C.—Extension to Tool and Miscellaneous Shop—Bureau Yards and Docks received low bids (a) work complete, (b) alternate, from M. A. Weller Co., Inc., 816 14th Ave., (a) $18,992, (b) $19,692; Richardson & Burgess Co., Inc., Colorado Bldg., (a) $22,300, (b) $22,000; W. E. Mooney, Evans Bldg., (a) $28,164, (b) $28,514.

Wash., D. C.—Motor-Generator Sets and Accessories—Bureau Yards and Docks, Navy Dept., received low bids furnishing at Navy Yards (a) Phila., (b) Boston, (c) Mare Island., Vallejo P. O., Cal., (d) naval base, San Pedro, Cal., from Westinghouse Electric & Mfg. Co., 165 Bway., New York City, (a) $27,500 (b) $27,500, (c) $32,000, (d) $47,000; **Allis-Chalmers Mfg. Co., West Allis, O., (a) $31,900, (b) $25,730, (c) $26,760, (d) $39,930; Ridgeway Dynamo & Eng. Co., Ridgeway, Pa. (a) $27,950, (b) $27,950, (c) $30,938, (d) $43,569.**

Wash., D. C.—Naval Ammunition Depot—Bureau Yards and Docks, Navy Dept., received low bids building addition to Bldg. No. 13, St. Juliens Creek, Va., from Simmons, Hartenstein & Whitten Co., Charlotte, S. C., $10,209; Penn Bridge Co., York, Pa., $14,972.

★Va., Hampton—Garbage Incinerator—Bureau Yards and Docks, Navy Dept., Wash., let contract for garbage incinerator at Hampton Rds. to W. F. Klemp, Monadnock Blk., Chicago, $12,750.

★Va., Newport News—Warehouse—War Dept., N. D. Baker, Secy., let contract to J. G. White & Co., 43 Exchange Pl., New York City, $800,000.

Va., Norfolk—Distributing System—Bureau Yards and Docks, Navy Dept., Wash., received low bids (work complete), from Carroll Electric Co., 714 12th St., Wash., D. C., $365,217; H. E. Crook & Co., Inc., 28 Light St., Baltimore, $393,760; J. W. Danforth Co., 70 Ellicott Sq., Buffalo, $416,448.

★Va., Norfolk—Elevated Steel Tank and Tower—Bureau Yards and Docks, Navy Dept., Wash., let contract to Pittsburgh & Des Moines Steel Co., 806 Curry Bldg., Pittsburg, $16,830. Noted Sept. 6.

★S. C., Port Royal—Hospital Buildings—Bureau Yards and Docks, Wash., let contract temporary hospital buildings, at Paris Island, to McCraddy & Cheves, 4 Broad St., Charleston, cost plus 10%.

★Ga., Forsyth—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to J. H. Wilder, Columbus Rd., Macon, $30,917. Noted Sept. 13.

★Ga., Washington—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to W. J. Brent, 506 Bd. Trade Bldg., Norfolk, $39,876. Noted Sept. 13.

★Fla., Key West—Filling—Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., let contract to East Coast Ry. Co., Key West, $12,000.

★Ala., Montgomery—Cement—U. S. Engr. Office, Montgomery, let contract furnishing 14,000 bbl. American portland cement to W. R. Taylor & Co., Pensacola, $12,120. Noted May 17.

★La., Lake Charles—Aviation Camp—Constructing Officer, Aviation Sect., Army Signal Corps, rescinded contract let to Janse Bros., Bellecastle and Revin St., and Bommer, Crain & Howe, both of New Orleans, and relet same to Mason & Hanger, Richmond, $1,500,000 plus percentage. Noted Sept. 13.

★La., New Orleans—Emergency Building—Bureau Yards and Docks, Navy Dept. Wash., let contract, West End Park, to J. Thatcher & Son, 201 Hennen Bldg., $19,200.

★Tenn., Memphis—Levee Work—Mississippi River Comn. let contract earthwork, St. Francis Levee Dist., to H. B. Blanks, $178,100. Noted Sept. 13.

★Tenn., Memphis—Levee Work—Mississippi River Comn., U. S. Engr. Office, let contract levee work, Lower St. Francis and White River Dists., to Roach-Stansell-Lowrance Bros. Co, Savings Bank Bldg., $439,150 and $46,550 respectively. Noted Aug. 9.

★Mich., White River—Buildings and Launchway—E. P. Bertholf, capt. commandmant, U. S. Coast Guard, Wash., let contract moving, alterations, additions and repairs to station building and launchway at Coast Guard Sta. No. 268, to Johnson & Mysen, 41 Ranson St., Muskegon, $26,700. Noted Aug. 2.

★Kan., Eldorado—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to Johnson Constr. Co., Fargo, N. D., $43,497. Noted Aug. 30.

★Ark., Rodgers—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to C. Weitz & Son, 713 Mulberry St., Des Moines, Ia., $41,900. Noted Sept. 13.

★Tex., Dallas—Aviation Camps—Constructing Officer, Aviation Sect., Army Signal Corps, let contract to Hedrick Constr. Co., 405 Hughes Bldg., $750,000 plus percentage.

Federal Government Work (Continued)

★Tex., Houston—Aviation Camp—Bureau Yards and Docks, Navy Dept., Wash., let contract to American Constr. Co., 411 Gulf Bldg., $750,000 plus percentage.

★Colo., Glenwood Springs—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to C. Weitz & Sons, 713 Mulberry St., Des Moines, Ia., $76,200. Noted Sept. 6.

N. M., Raton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, from G. A. Shaul, Seneca, Kan., $54,195; W. O. Neil & Son, Faribault, Minn., $58,745; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, $63,850. Noted Aug. 23.

Hawaii, Pearl Harbor—Storehouse—Bureau Yards and Docks, Navy Dept., Wash., received low bid (a) work complete, (b) deduct for one 16-ft. bay, from Hamilton Chambers Co., New York City, (a) $129,000, (b) deduct $10,000. Noted Aug. 30.

MISCELLANEOUS

Proposed Work

Stadium—New York, N. Y. — Trustees New York City College plans, 136th St. and Amsterdam Ave. About $12,000.

Transmission Line — Johnstown, Pa. — Penn Central Electric Co., Johnstown, plans to build line to Carrollton.

Subway—Phila., Pa.—Smith Hauser & MacIsaac, Inc., 18 East 41st St., New York City, recently awarded Contr. No. 202, totaling $2,250,000, and Phila. Subway Constr. Co., 712 Lincoln Bldg., Contr. No. 104, totaling $2,900,000, have refused to accept same. The work will be readvertised and split up into small parts. Keystone State Constr. Co., 704-9 Penn. Bldg., has accepted its contracts, amounting to about $10,200,000. Noted Aug. 2.

Bulkhead—Annapolis, Md.—City soon let contract High and Dock St. G. Vansant, engr.

Floating Dry Dock—Charleston, S. C.—Valk & Murdock Co. plans to build, 440 ft. long. About $300,000. Address H. Calhoun.

Wharf—Mobile, Ala.—Louisville & Nashville R.R. plans to build 404 ft. long, 2 units, continuous bucket conveyor type, delivery chutes capable of 36-ft. vertical adjustment, 25-ft. horizontal sway. W. H. Courtenay, Louisville, Ky., ch. engr.

Park—O., Cleveland — See "Industrial Works."

Diking—Omaha, Neb.—Douglas Co. plans to dike Elkhorn River.

Tunnel, Incinerator, Etc.—St. Louis, Mo.—City postponed election to vote on $18,840,000 bond issue; $6,650,000 to be used for building tunnel under River des Peres; $250,000 for garbage plants; $100,000 street material; $1,000,000 southern approaches to free bridge; $500,000 streets and viaducts; $150,000 Koch Hospital extension and other municipal improvements. E. R. Kinsey, pres. bd. pub. ser. Noted Feb. 15.

Pipe Line—Damon Mound, Tex.—Rio Bravo Oil Co., subsidiary of Southern Pacific Lines, Southern Pacific Bldg., Houston, plans to lay 11 mi. 6-in. pipe line from Damon Mound to Pledger and will also install railroad loading racks at Pledger.

Lake—Ennis, Tex.—City soon lets contract enlarging lake, work involves 20,000-cu.yd. excava.

Drydock—Galveston, Tex.—J. P. McDonough, of McDonough Iron Works, plans to build drydock. About $500,000.

Diking — Kalama, Wash. — Cowlitz Co. approved plans diking Improv. Dist. No. 5 to protect 7000 acres. G. J. Poysky, engr.

Seawall, etc. — Long Bach, Cal. — City Council plans to build combined rein.-con. sea wall, sidewalk, center wall, end walls, steps, lighting standards, sheridized conduits and vitr. pipe sewers on Seaside Blvd. A. De Ring, city engr.

Harbor Improvements—Newport Beach, Cal.—City plans election to vote on $50,000 bonds to improve harbor from East Newport to 24th St. also for dredging at mouth.

River Improvements—Ottawa, Ont.—Dominion Government appropriated $12,500 for diversion of Little Pembina River into Pelican Lake. R. C. Desrochers, secy. dept. pub. wks.

Harbor Improvements—Port Hope, Ont.—Dominion Government appropriated $13,500 for harbor improvements.

River Improvements, Etc. — Revelstoke, B. C.—Dominion Government appropriated $134,000 for Fraser River improvements; $100,000 dredging north arm Fraser River; $20,000 for extension of wing dam.

BIDS DESIRED

Elevated Railway—Brooklyn, N. Y.—Until Oct. 8, by New York Municipal Railway Corp., building 3rd rail and appurtenances on Culver Line. Address Ch. Engr., 85 Clinton St.

Station Finish—Brooklyn, N. Y.—Until Sept. 26, by Pub. Ser. Comn., 120 Bway., New York City, station finish for 11 stations on Culver Rapid Transit R.R. and certain other work at Bay Pkway. Sta. of Bway.-4th Ave. subway.

Garbage Incinerator—Sharon, Pa.—(Official)—Until Oct. 2, by C. B. Lartz, boro. secy., building odorless garbage incinerating plant.

Pier—Manhattan Beach, Cal.—(Official)—Until Oct. 17, by City, building rein.-con. pier. About $70,000. M. M. Murray, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Shaft—New York, N. Y. — Pub. Ser. Comn., 120 Bway., received low bids building shaft No. 2, Route No. 26, part of Queensboro Subway Rapid Transit Ry., from I. J. Stander Co., 118 East 28th St., $65,000; Subway Contg. Co., 165 Bway., $90,185; J. O'Leary, 411 East 42nd St., $123,000. Noted Aug. 23.

Bulkhead — Jersey City, N. J. — City Comrs. let contract concrete, at foot of Howell St., to Stillman-Delehanty-Ferris Co., 26 Exch. Pl., $61,750. Noted Aug. 30.

★Levee—Krotz Springs, La.—State Bd. Engrs., Baton Rouge, let contract building 90,000 cu.yd. Krotz Springs south levee, St. Landry Co., to Dameron-White Co., Ltd., New Orleans, $26,000.

Levee Work—New Orleans, La.—(Official)—Bd. Levee Comrs., Orleans Levee Dist., let contract 165,000 cu.yd. earthwork, etc., Lower Beka New Levee, 5th Dist., to T. O. Hatard, 320 Opelousas Ave., $24,403. Noted Aug. 23.

Levee—Plaquemine, La.—Pontchartrain Levee Bd. received low bids building 19,000 cu.yd. new levee, Iberville Parish and 90,000 cu.yd., St. John's Parish from Dameron-White Co., Ltd., New Orleans, $225,000.

★Breakwater—Kenosha, Wis.—City let contract building 1400 lin.ft. breakwater to protect lake shore property, to Greiling Bros., Walker St., Milwaukee, $58,800. Noted Aug. 2.

★Levee—Gregory Landing, Mo.—J. P. Foley, secy. Gregory D. D., let contract 180,000 cu.yd. levee work to McWilliams Northern Dredge Co., 15c. per cu.yd.

Dam—San Diego, Cal.—(Official)—City received low bids building cyclopean rein.-con. dam, Lower Otay site, from Wurster Constr. Co., Spreckles Bldg., $420,135; H. G. Fenton, Owl Drug Bldg., $450,000; J. Kennedy, Washington Bldg., Los Angeles, $586,737. Noted Aug. 23.

BUILDING OPERATIONS FOR AUGUST

Following is a list of contracts awarded, published by the F. W. Dodge Co. for New England, New York, New Jersey, Pennsylvania, Maryland, Delaware, District of Columbia, Virginia, Ohio, West Virginia, Illinois, Indiana, Iowa, Wisconsin, Michigan, Minnesota, North and South Dakota, and portions of Missouri and eastern Kansas from Jan. 1 to Sept. 1:

Jan. 1 to Sept. 1, 1917	$1,156,176,155
Jan. 1 to Sept. 1, 1916	838,024,922
Jan. 1 to Sept. 1, 1915	598,619,600
Jan. 1 to Sept. 1, 1914	531,915,200
Jan. 1 to Sept. 1, 1913	616,067,000
Jan. 1 to Sept. 1, 1912	558,820,000
Jan. 1 to Sept. 1, 1911	539,256,313
Jan. 1 to Sept. 1, 1910	589,175,910

NEW YORK AND
NORTHERN NEW JERSEY

Jan. 1 to Sept. 1, 1917	$212,328,000
Jan. 1 to Sept. 1, 1916	145,085,500
Jan. 1 to Sept. 1, 1915	101,629,000
Jan. 1 to Sept. 1, 1914	91,632,000
Jan. 1 to Sept. 1, 1913	196,256,000
Jan. 1 to Sept. 1, 1912	169,247,000
Jan. 1 to Sept. 1, 1911	165,930,000
Jan. 1 to Sept. 1, 1917	180,359,500

Contracts for the larger territory covered for August amount from $165,574,155 against $159,200,000 for July and $206,541,000 for June. For the smaller territory contracts for August amount to $25,498,000 against $31,549,000 for July and $27,387,000 for June. In both territories quoted the contracts awarded show a fair average against the two previous months, with no dropping off the work.

Could you handle another contract?

PERHAPS for a road? Or a bridge? Or a sewer? Or any one of the multitude of items listed in this week's *Contracting News Section?*

Then read that Section carefully.

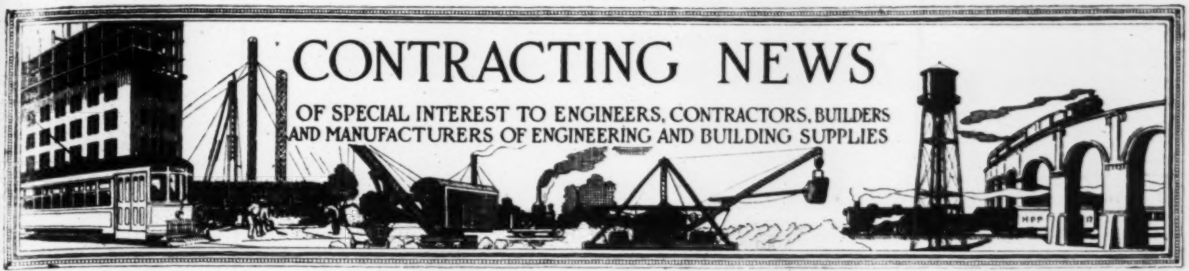
It takes over one hundred men to provide those items—one hundred trained correspondents whose job is to call upon city officials, engineers, architects, etc., the country over, to learn of all proposed work.

Summed up, this means that there are one hundred men working for *your* benefit.

Are you actually benefitted?

There is just one way to do it, you know:

Read the Contracting News Section



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 46 to 51 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Oct. 1.	St. Paul, Minn.	Sept. 20
Oct. 2.	Johnstown, N. Y.	Sept. 13
	Adv. Sept. 13 to 27.	
Oct. 2.	Lewisburg, O.	Sept. 20
	Adv. Sept. 20 and 27.	
Oct. 2.	Toronto, Ont.	Sept. 13
Oct. 10.	Polk, Pa.	Sept. 20
	Adv. Sept. 20 and 27	

SEWERS

Bids Close		See Eng. News-Record
Sept. 29.	Hagerstown, Md.	Sept. 13
	Adv. Sept. 13.	
Oct. 1.	Huntington, W. Va.	Sept. 27
Oct. 1.	Middleton, O.	Sept. 27
Oct. 2.	Ada, Okla.	Sept. 27
Oct. 5.	Roselle, N. J.	Sept. 27
Oct. 8.	Stratford, Conn.	Sept. 20
	Adv. Sept. 20.	
Oct. 13.	Cuyahoga Falls, O.	Sept. 27
Oct. 14.	Pleasantville, N. J.	Sept. 27
Oct. 16.	Wabash, Minn.	Sept. 27

BRIDGES

Bids Close		See Eng. News-Record
Oct. 1.	Indiana	Sept. 20
Oct. 1.	Elkins, W. Va.	Sept. 20
Oct. 1.	Hays, Kan.	Sept. 27
Oct. 1.	Indiana	Sept. 27
Oct. 2.	Indiana	Sept. 27
Oct. 2.	Westmoreland, Kan.	Sept. 27
Oct. 2.	Reading, Pa.	6Sept. 20
	Adv. Sept. 20 and 27.	
Oct. 2.	West Palm Beach, Fla.	Sept. 20
Oct. 2.	Woodbine, Ga.	Sept. 20
Oct. 2.	Olympia, Wash.	Sept. 20
Oct. 2.	Albany, N. Y.	Sept. 6
	Adv. Sept. 6 to 27.	
Oct. 2.	Columbus, O.	Sept. 13
	Adv. Sept. 13.	
Oct. 3.	Lyndon, Kan.	Sept. 27
Oct. 4.	Texarkana, Ark	Sept. 13
	Adv. Sept. 13.	
Oct. 4.	Indiana	Sept. 27
Oct. 4.	Algona, Ia.	Sept. 27
	Adv. Sept. 27.	
Oct. 5.	Corydon, Ind.	Sept. 20
Oct. 6.	Indiana	Sept. 27
Oct. 8.	Minneapolis, Minn.	Sept. 27
Oct. 9.	Walker, Minn.	Sept. 20
Oct. 13.	Weston, W. Va.	Sept. 27
Oct. 16.	Glenville, W. Va.	Sept. 27
Oct. 20.	Pennsylvania	Sept. 20
Oct. 20.	Charleston, W. Va.	Sept. 27
Oce. 23.	Ft. Dodge, Ia.	Sept. 27
	Adv. Sept. 27.	

STREETS AND ROADS

Bids Close		See Eng. News-Record
Sept. 28.	Hartford, Conn.	Sept. 27
	Adv. Sept. 27.	
Sept. 29.	Granite City, Ill.	Sept. 27
	Adv. Sept. 27.	
Oct. 1.	Lincoln, Neb.	Sept. 6
Oct. 1.	Miami, Fla.	Sept. 20
Oct. 1.	Indiana	Sept. 20
Oct. 1.	Oroville, Cal.	Sept. 20
Oct. 1.	Bad Axe, Mich.	Sept. 27
Oct. 1.	Finch, Ont.	Sept. 27
Oct. 1.	Bismarck, N. D.	Sept. 27
Oct. 1.	Westfield, N. J.	Sept. 27
Oct. 2.	Massachusetts	Sept. 27
Oct. 2.	Indiana	Sept. 20
Oct. 2.	Maryland	Sept. 20
	Adv. Sept. 20 and 27.	
Oct. 2.	Jersey City, N. J.	Sept. 27
Oct. 3.	Charleston City, Mo.	Sept. 27
Oct. 3.	Elyria, O.	Sept. 27
Oct. 3.	Cleveland, O.	Sept. 27
Oct. 3.	Indiana	Sept. 20
Oct. 4.	Carrollton, Ala.	Sept. 20
Oct. 4.	Newark, N. J.	Sept. 27
Oct. 5.	Indiana	Sept. 20
Oct. 5.	Jefferson City, Mo.	Sept. 27
Oct. 6.	Bowling Green, O.	Sept. 13
Oct. 6.	West Allis, Wis.	Sept. 27
Oct. 8.	California	Sept. 20
Oct. 8.	Mendota, Ill.	Sept. 27
Oct. 9.	Pennsylvania	Sept. 20
	Adv. Sept. 20 and 27.	
Oct. 9.	Modesta, Cal.	Sept. 27
Oct. 11.	Newton, N. J.	Sept. 20
	Adv. Sept. 20 and 27.	
Oct. 11.	Oneonta, Ala.	Sept. 13
Oct. 12.	Stealey Heights, W. Va. (Clarksburg P. O.)	Sept. 27
Oct. 13.	Wedowee, Ala.	Sept. 20
Oct. 15.	Newark, N. J.	Sept. 13
Oct. 16.	Cape May, N. J.	Sept. 6
Oct. 16.	Pennsylvania	Sept. 20
Oct. 24.	Paterson, N. J.	Sept. 27
Nov. 5.	Pikeville, Ky.	Sept. 27

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Oct. 1.	Le Sueur, Minn.	Sept. 20
Oct. 1.	Estherville, Ia.	Sept. 27
Oct. 2.	Clarksdale, Miss.	Sept. 20
Oct. 2.	St. Cloud, Minn.	Aug. 2
Oct. 2.	Urbana, Ill.	Sept. 6
Oct. 3.	Anoka, Minn.	Sept. 20
Oct. 5.	Savannah, Ga.	Sept. 20
Oct. 5.	Pittsfield, Ill.	Sept. 27
Oct. 9.	Albany, N. Y.	Sept. 13
	Adv. Sept. 13 to 27.	
Oct. 8.	Marshall, Minn.	Sept. 27
Oct. 10.	Willmar, Minn.	Sept. 27
Oct. 10.	Lafayette, Ind.	Sept. 20
Oct. 15.	Willmar, Minn.	Sept. 13
Oct. 20.	Waterford, Cal.	Sept. 27
Nov. 9.	St. Cloud, Minn.	Sept. 27

BUILDINGS

Bids Close		See Eng. News-Record
Sept. 28.	Theills, N. Y.	Sept. 13
	Adv. Sept. 13 and 20.	
Sept. 30.	Eden, S. D.	Sept. 20
Oct. 2.	Castleton, N. Y.	Sept. 20
Oct. 2.	Clay Center, Neb.	Sept. 27
Oct. 2.	Buffalo, N. Y.	Sept. 27
Oct. 2.	Newark, N. J.	Sept. 27
Oct. 3.	Cresco, Ia.	Sept. 13
Oct. 5.	Thiells, N. Y.	Sept. 13
	Adv. Sept. 13 and 20.	
Oct. 15.	New York, N. Y.	Sept. 27
Oct. 17.	Wichita, Kan.	Sept. 27
Oct. 20.	Oxford, O.	Sept. 27
Dec. 1.	Norfolk, Va.	Sept. 13

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Sept. 29.	Memphis, Tenn.	Sept. 20
	Adv. Sept. 20.	
Oct. 1.	Twin Falls, Idaho	Aug. 30
Oct. 1.	Louisville, Ky.	Sept. 13
	Adv. Sept. 13 to 27.	
Oct. 1.	Cleveland, Ohio	Sept. 6
Oct. 1.	Kuahua, H. T.	Sept. 20
Oct. 1.	Philadelphia, Pa.	Sept. 20
Oct. 1.	Washington, D. C.	Sept. 20
Oct. 1.	New Orleans, La.	Sept. 27
Oct. 1.	Newport, R. I.	Sept. 27
Oct. 1.	Pensacola, Fla.	Sept. 27
Oct. 2.	San Francisco, Cal.	Sept. 6
Oct. 2.	Wheeling, W. Va.	Sept. 13
	Adv. Sept. 13 to 27.	
Oct. 2,	Galveston, Tex.	Sept. 20
	Adv. Sept. 20 and 27.	
Oct. 2.	San Francisco, Cal.	Sept. 20
	Adv. Sept. 13 to 27.	
Oct. 4.	Boston, Mass.	Sept. 13
	Adv. Sept. 13 to 27.	
Oct. 4.	St. Peter, Minn.	Sept. 6
Oct. 4.	New Orleans, La.	Sept. 27
	Adv. Sept. 27.	
Oct. 6.	Newport, R. I.	Sept. 13
	Adv. Sept. 13 and 20.	
Oct. 8.	Pensacola, Fla.	Sept. 27
Oct. 8.	Ft. Mifflin, Pa.	Sept. 27
Oct. 8.	Washington, D. C.	Sept. 27
Oct. 12.	Bad Axe, Mich.	Sept. 13
Oct. 15.	Denver, Colo.	Sept. 13
	Adv. Sept. 13.	
Oct. 15.	Waynesboro, Va.	Sept. 13
Oct. 15.	El Paso, Tex.	Sept. 20
	Adv. Sept. 20.	
Oct. 15.	Philadelphia, Pa.	Sept. 27
Oct. 15.	Denver, Colo.	Sept. 27
Oce. 15.	El Paso, Tex.	Sept. 27
Oct. 23.	Andalusia, Ala.	Sept. 20
Oct. 24.	Bakersfield, Cal.	Sept. 20
	Adv. Sept. 20 and 27.	
Oct. 26.	Mt. Carmel, Ill.	Sept. 20
Oct. 28.	Waterloo, N. Y.	Sept. 20
Oct. 30.	Key West, Fla.	Sept. 6
	Adv. Sept. 6 and 13.	
Oct. 30.	Farmville, Va.	Sept. 27
Nov. 1.	Kenton, O.	Sept. 27

MISCELLANEOUS

Bids Close		See Eng. News-Record
Oct. 1.	Station Finish Brooklyn, N. Y.	Sept. 20
Oct. 2.	Garbage Incinerator Sharon, Pa.	Sept. 20
Oct. 8.	Elevated Railway—Brooklyn, N. Y.	Sept. 20
Oct. 17.	Pier—Manhattan Beach, Cal.	Sept. 20
Oct. 23.	Pier—New York, N. Y.	Sept. 27
	Adv. Sept, 27.	
Nov. 15.	Flood Control—Dayton, O.	Sept. 13
	Adv. Sept. 13 to 27.	

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

Mass., Springfield — City Council voted $20,000 bond issue to extend water mains on Holmes Rd. F. H. Clarke, city engr.

N. J., Pompton—Twp. Comn. plans laying water mains through Midvale and Wanaque. About $150,000.

La., Westwego—A. Marrer, Gretna, plans to organize company to install water system here. Bonds for $25,000 to be sold for work.

Tenn., Lebanon—City election Oct. 6. to vote on $25,000 bond issue to build waterworks and electric-light plant. Noted June 21.

Ky., Poor Fork—See "Industrial Works."

O., Newark—City plans to vote on $90,000 bond issue soon for water filtration plant, 5,000,000 gal. capacity. C. H. Wells, city engr.

O., Toledo—See "Sewers."

O., Woodville—City election in November to vote on $55,000 bond issue to install water-works plant.

O., Wooster—City receives bids about Oct. 1 improving water-works system, involving 8000 lin.ft. 16-in. c.-i. and wood pipe. About $150,000. O. A. Gierow, city engr. Noted May 10.

Water-Works (Continued)

Ill., Alton—Illinois Glass Co., 2nd and Wabash Sts., soon lets contract filtration plant. About $30,000.

Ia., Atlantic—City receives bids about Oct. 1 for water storage basin, 1,250,000 gal. capacity. J. H. Mayne, Merriam Blk., Council Bluffs, engr. Noted Aug. 30.

Ia., Lohrville—Council authorized $10,000 bond issue to build water-works system.

Kan., Galena—City election soon to vote on $100,000 bond issue for filtration plant. R. C. French, clk.

Kan., La Crosse—Council passed ordinance to issue $22,000 bonds for water-works system.

Neb., Ord—City election soon to vote on $30,000 bond issue for enlarging water and electric light plants. W. Sorenson, comr.

N. D., Minot—City soon lets contract 3,000,000-gal. rein.-con. reservoir and water mains. E. J. Thomas, city engr.

Mont., Eureka—City to sell $16,000 bonds to install gravity water system, 1,000,000 gal. capacity. Noted June 14.

Mont., Phillipsburg—City to sell $10,000 bonds Oct. 8 for water-works system. J. J. Tausman, supt. W. Neu, clk. Noted Aug. 2.

Mont., Poplar—Town to sell $25,000 bonds Oct. 1 for water-works system. W. E. Inglehart, clk. Noted Sept. 13.

Mo., Joplin—City election Oct. 2 to vote on $100,000 bond issue for water-works system. J. J. McAfee, city engr.

Tex., Valera—Gulf, Colorado & Santa Fe Ry. appropriated $117,487 to build reservoir and pipe line. F. G. Pettibone, Galveston, genl. mgr.

Okla., McAlester—City election soon to vote on bond issue for water-works system. F. D. Pittman, supt.

Okla., Miami—See "Sewers."

Okla., Woodward—City defeated $42,000 bond issue for water-works and electric light systems. F. H. Kilburn, supt. Noted Aug. 16.

Idaho, Hailey—City election soon to vote on $90,000 bond issue for water-works system and power plant. J. Vernon, engr.

Idaho, Ririe—City voted $17,000 bonds for water-works system.

Utah, Monticello—Blue Mountain Irrigation Co., owners Monticello light and water-works systems, plans $60,000 bond issue for improvements.

Ore., Joseph—City having plans prepared extending water pipe line and other improvements to water-works system. W. S. Harrell, supt.

Cal., El Centro—City election Oct. 30 to vote on $55,000 bond issue to build filtration plant. C. H. Field, supt. Noted Aug. 2.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., New York—(Official)—Bd. Water Supply, Municipal Bldg., let contract Shadaken Tunnel to Degnon Contg. Co., 68 Hunters Point Ave., Long Island City, $12,138,-738. Noted Sept. 20.

★N. Y., Rochester—City let contract water-main extensions and cast-iron pipes in several streets to W. E. Kinney & Co., 406 Livingson Bldg. About $20,546.

★Pa., Aspinwall — See "Streets and Roads."

★Md., Cumberland—Evitts Creek Water Co., Cumberland, let contract filtration plant to Pitt Constr. Co., 1227 Fulton Bldg., Pittsburgh, $77,292. Noted Sept. 20.

★Va., Newport News—Newport News Light & Water Co. let contract installing new filter plant to Roberts Filter Co., Darby, Pa., $500,000.

★Miss., Marks—See "Sewers."

O., Dayton—City received low bids steel and rein.-con. reservoir from F. H. Smith, 1035 Reibold St., $93,955; Danis Hunt Constr. Co., 1st and Webb Sts., $110,000; Miami Constr. Co., 30 Hess St., $146,525. Noted Sept. 13.

★Minn., Duluth—City let contract for water and gas mains to new McDougal Shipyards, to Pastoret Co., 511 Lyceum Bldg. and Riback & Parvi. About $30,000.

★Minn., Ogilvie—Village let contract water-works system to Thornton Bros., 305 Scandinavian Bank Bldg., St. Paul, $36,000. Noted Sept. 27.

★Mont., Ronan—City let contract water-works system to C. H. Kelley, Kalispell, $21,800. Noted Aug. 30.

★Mont., Toston—City let contract water-works system to Monarch Constr. Co., 3 Michigan Bldg., Bozeman, $16,000.

★Mo., Hamilton—City let contract water-works system to O'Neil Constr. Co., Leavenworth, Kan., $31,000. Noted Sept. 13.

SEWERS

Proposed Work

N. H., New Boston—City sold $10,500 bonds for extending sewers.

N. Y., Batavia—City voted $80,000 bonds to repair sewage-disposal plant and improve parks. R. F. Clark, city engr.

N. Y., Canisteo—Canisteo Tanning Co., Canisteo, submitted plans to State Conservation Comn. for large sewage-purifying plant to purify sewage before it goes into Canisteo River.

N. Y., New York—Queens Sewer Bureau had plans prepared for drainage sewer, Rockaway Coast Sect. About $1,000,000. J. W. Blake, engr.

N. Y., Sea Cliff—Sea Cliff Water Co., Sea Cliff, plans to install sewage-disposal plant. E. M. Ledden, 404 4th Ave., New York City, secy.

N. J., Dover — City plans trunk sewer through Rockaway Valley from Dover to Boonton Reservoir to protect Jersey City's water supply. G. E. Jenkins, city engr.

N. J., Paterson—Bd. Pub. Wks. plans sewer in East 19th St. H. J. Hordes, city engr.

Pa., Lansford—City election in November to vote on $50,000 bond issue to build sewers, parks and pave streets. J. B. Warriner, city engr.

Pa., West Chester—Boro. had plans prepared for extension Howell Run disposal plant. N. R. Bambo, boro. engr.

Fla., St. Augustine—See "Bridges."

Fla., Zolfo—Town voted $15,000 bonds for extending sewerage system.

Ky., Poor Fork—See "Industrial Works."

O., Cincinnati—(Official)—City to sell $920,000 bonds Oct. 15 to build Millcreek trunk sewer and sewers in Madisonville, Westwood, Clifton, Avondale and other districts. F. Krug, city engr. Noted Aug. 23.

O., Elyria—City plans to issue $40,000 bonds for sewers and paving. C. M. Theobald, city engr.

O., New Boston—City sold $10,500 bonds for sewer extensions.

O., Toledo—(Official)—City lets contract about Dec. 1, 6-mi. 42 to 72-in. sewers and pumping plant. H. C. McClure, city engr. Noted Sept. 13 under "Waterworks."

Mich., Lansing—City plans sewer portions Sheridan St. H. W. Sparks, city engr.

Mich.,. St. Clair Heights—(Detroit P. O.)—City election soon to vote on $10,000 bond issue to install sewerage system and $25,000 for incinerator.

Ill., Chicago—Sanitary Dist. of Chicago having plans prepared by H. I. Steffa, engr., for Calumet Sewage Pumping Sta., 90 x 133 ft., 127th St. and Indiana Ave. A. Smyth, 910 South Michigan Ave., pres.

Minn., St. Cloud—City plans laying storm sewer to proposed plant of Pan Motor Co., also sewer from Mississippi River to 8th and 16th Sts. About $55,000 and $50,000 respectively. R. E. Borrowman, city engr.

Neb., Oakland—City voted $35,000 bonds for sewers.

Neb., Omaha—City plans to build sewer system south of 6th Ave. About $78,084. W. Townsend, city engr.

Tex., Austin—City election Oct. 2 to vote on $225,000 bond issue to install Imhoff tank-trickling filter plant, $50,000 for storm sewers and paving and $40,000 fire alarm system. M. C. Welborn, city engr. Noted Aug. 16.

Tex., Ft. Worth—City plans to install sewage disposal plant. About $350,000. F. J. Von Zulen, city engr.

Tex., Nacogdoches—City soon lets contract installing sewerage system. About $40,000.

Okla., Miami—City election soon to vote on $200,000 bond issue; $80,000 to be used for storm sewers, $20,000 sanitary sewers and $45,000 for water mains. A. L. Sailors, supt.

Wash., Spokane — City had plans prepared for 5 lateral sewers. About $13,500. M. Macartney, city engr.

Ore., Portland—City will install sewerage system in Frost Ave., East Deering. About $40,000. E. M. Hunt, city engr.

Ont., Windsor—City had plans prepared by M. E. Brian, engr., sewers in portions Moy and Hall Sts. About $28,000.

BIDS DESIRED

N. J., Pleasantville—Until Oct. 15, by City Council, for sewerage system and disposal plant. About $125,000. Remington & Voxbury, 6th and Market Sts., Camden, engrs. Noted Aug. 23.

N. J., Roselle—Until Oct. 5, by Boro., for 924 lin.ft. 8-in. stoneware pipe sewers in 10th Ave. and Oak St., 1147 ft. in 5th Ave., 300 ft. in Meadow St. J. L. Bauer, Elizabeth, co. engr.

W. Va., Huntington—Until Oct. 1, by City Comrs., building sewers portions Richmond St. and several alleys; also paving, grading and curbing certain streets. A. B. Maupin, city engr.

O., Cuyahoga Falls—(Official)—Until Oct. 13, by W. F. Williston, village clk., for Hotel Ave. lateral sewerage system, including 7500 cu.yd. earth excava., 300 cu.-yd. rock trench excava., 22 manholes and 2 mi. 6-12-in. sewer pipe. E. D. Barstow, village engr. R. W. Pratt, Hippodrome Bldg., Cleveland, cons. engr.

O., Middletown—(Official)—Until Oct. 1, by City Comn., tile storm and sanitary sewer, and house connections on portion Plum St. J. Kunz, clk. W. C. Morrison, city engr. Noted May 24.

Minn., Wabasha—Until Oct. 16, by City for extending sewerage system. J. F. Druar, 312 Commercial Bldg., St. Paul, engr.

Okla., Ada—(Official)—Until Oct. 2, by City, for sewage disposal plant, including Imhoff tank, contact beds, etc., also constructing lateral sewer Dist. No. 6, involving about 3315 ft. 10-in. and 13,890 ft. 8-in. vitr. sewer pipe. W. E. Conger, clk. Benham Eng. Co., Colcord Bldg., Oklahoma, engrs.

Cal., San Diego—(Official)—Until Oct. 1, by A. H. Wright, city clk., for rein.-con. storm drain. G. Cromwell, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Leominster—City rejected bids for sewage-disposal plant. Will build by day labor. Noted July 12.

N. Y., Brooklyn—L. H. Pounds, boro. pres. received low bid sewage pumping station and superstructure, sewers and appurtenances, from Fryner & Hanna, 25 West 45th St., New York City, $45,837.

★N. Y., New York — (Official) — D. Mathewson, boro. pres. (Bronx Boro.), let contract sewer, portions Boston Rd., to J. M. Stanton & Co., 762 East 165th St., $98,564. Noted Sept. 20.

N. Y., New York—M. M. Marks, boro. pres., received low bids (a) receiving basins, inlets and remodelled basins on 7th Ave. extension from Leroy St. to Greenwich Ave., (b) Varick St., from Leonard to Carmine St., from E. J. McLaughlin, 337 East 134th St., (a) $11,070, Walton Contg. Co., 147 East 125th St., (a) $12,320, (b) $15,084; Burnside Contg. Co., 270 Burnside Ave., (a) $12,560, (b) $11,485; Gasperini & De Blasio, (b) $15,017.

★N. Y., Rochester—Bd. Contract & Supply let contract Cantilever Gantry crane and transfer table for main sewage disposal plant to Seneca Eng. & Co., Montour Falls.

★N. J., Ocean City—City let contract 1500 ft. 24-in. c.-i. pipe storm water drain in 12th St. to Smith-Porter Co., $14,000.

★Pa., Pittsburgh—Dept. Pub. Wks. let contract sewers, grading, paving and curbing to Booth & Flynn, 1942 Forbes St., $21,-803; and Manella Constr. Co., 1507 North Lang Ave., $10,804.

★Miss., Marks—City let contract sewerage system and extending water-works to P. W. Seay, Hattiesburg, $25,000.

★O., Fostoria—See "Streets and Roads."

O., Springfield — City received low bid sewer portion North Fountain Ave., from P Gaffrey, 609 Linden Ave., $10,480.

Sewers (Continued)

★Ill., Elgin—(Official)—City let contract sewerage system in River and other streets to E. M. Scheflow, Elgin, $14,975. Noted June 21.

★Ill., Rockford—Bd. Local Improvs. let contract sewer in portion Crosby St., $31,040.

★Minn., Caledonia—City let contract sewerage system to E. T. Sykes Co., 2317 Pleasant Ave., Minneapolis, $42,974. Noted Sept. 13.

★Minn., Dodge Center—Village let contract sewerage system to Moore-Seig Constr. Co., 1126½ East 4th St., Waterloo, Ia., $32,550. Noted Aug. 23.

Minn., Ogilvie—See "Water-Works."

Minn., St. Paul—City received low bid storm sewer, portion Fairview St., from O'Neill & Preston, 60 East 6th St., $87,400.

★S. D., Beresford—City let contract 3-mi. sewers to Tanebust Bros., Sioux Falls, $25,058. Noted Apr. 19.

★Mo., Kansas City—City let contract Troost Ave. truck line sewer to M. Walsh, Kansas City, $165,000.

★Mo., Kansas City—City let contract southeast sewerage system to Halpin & Boyle, Ry. Ex. Bldg., $119,000.

★N. M., Las Cruces—City let contract new college sewer district to Las Cruces Lumber Co., Las Cruces, $10,000.

★Idaho, Emmett—City let contract sewerage system to C. Helmer, Twin Falls, $31,449. Noted June 21.

Ore., Astoria—City received only bid Scow Bay sewerage system from West Coast Constr. Co., Warrenton, $50,000.

Ore., Astoria—City received low bid building Sewer Dist. No. 3 from Coluccio & Moceri, 1642 Lane St., Seattle, $43,900. Noted Sept. 13.

Ore., Portland—City received low bid for sewer in Klickitat St. and East 65th sewerage system, vitr. pipe. J. F. Shea, 583 Johnson St., $26,460.

Cal., San Diego—City received low bid sewerage system, Ocean Beach Dist., from J. Kennedy, Washington Bldg., Los Angeles, $92,394. Noted June 21.

BRIDGES

Proposed Work

R. I., Woonsocket—(Official)—Bd. Aldermen rejected bids building rein.-con. bridges, Contr. Nos. 1, 2 and 3. F. H. Mills, engr. Noted Sept. 6.

N. Y., Rochester—City plans to build new bridge over Barge Canal harbor on Clarissa St. About $300,000. State to bear part of cost. F. T. Elwood, city engr.

N. J., Bellemead—Philadelphia & Reading Ry. submitted plans to Bd. Freeholders Somerset Co., Somerville, for improvements here to include new bridge, elimination of grade crossings, etc. About $120,000. S. T. Wagner, Phila., ch. engr.

N. J., Trenton—Pennsylvania R.R. plans bridge on Brunswick Pike over Delaware and Raritan Canal, Bakers Basin. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Pa., Middletown—Boro., Pennsylvania R. R. A. C. Shand, Broad St. Sta., Phila., ch. engr., Middletown Car Co., State Highway Dept., and Dauphin Co. Comrs., Harrisburg, had plans prepared new bridge over Wilson St. About $48,000.

Pa., Uniontown—Fayette Co. will build 8 concrete bridges over streams in various sections of county; 3 to be located along Connellsville-Pennsville Rd. About $50,000.

Fla., St. Augustine—City election in November to vote on $2,000,000 bond issue, proceeds to be used for arch bridge, 1500-ft. long, 42 ft. wide; sewerage system; concrete sea wall, water front improvements, etc.

La., Shreveport—Levee Bd. Caddo Co. plans to build Cross Bavon and Tim Morings draw span bridges. Address Secy. Levee Bd., Shreveport.

Ky., Paducah—(Official)—McCracken Co. rejected bids building bridge, 4 80-ft. steel spans, concrete substructure and floors. R. H. Young, engr. Noted Sept. 13.

O., Cincinnati—See "Streets and Roads."

Ill., East St. Louis — Municipal Bridge Comn. plans to widen Free Bridge, 10th St. and Piggott Ave. About $10,000. St. Louis and East St. Louis Interurban System to appropriate toward cost. E. F. Harper, city engr.

Ill., Quincy—See "Streets and Roads."

Neb., Center — Knox Co. receiving bids about Oct. 20, building 180-ft. steel span over Verdigris River. G. E. Johnson, Lincoln, bridge engr.

Neb., Gering — Scottsbluff Co. receiving bids about Oct. 20, building 600 ft. rein.-con. bridge over North Platte River. G. E. Johnson, Lincoln, state bridge engr.

Neb., North Platte—Lincoln Co. receiving bids about Oct. 20 building 600 ft. rein.-con. bridge over Platte River. G. E. Johnson, Lincoln, state bridge engr.

Mo., Linn—See "Streets and Roads."

Okla., Holdinville — See "Streets and Roads."

Wash., Port Orchard—Kitsap Co. Comrs. receiving bids about Oct. 1 building rein.-con. bridge. About $20,000.

BIDS DESIRED

W. Va., Charleston—Until Oct. 20, by Kanawha Co., building steel highway bridge over Elk River, near Big Chimney. F. G. Burdette, co. engr.

W. Va., Glenville—Until Oct. 16, by Gilmer Co., building bridge over Steer Creek, rein.-con. and stone abutments. N. E. Rymer, clk.

W. Va., Weston—Until Oct. 13, by Lewis Co., building rein.-con. bridge over Polk Creek. L. Troxell, clk.

Indiana—Until Oct. 1 by Clay Co. Comrs., Brazil, building Drake, Francis, Beamer and Cutshall bridges. W. O. Graeser, aud.
Until Oct. 2 by Wabash Co. Comrs., Wabash, building concrete flat top bridge, Lafontaine Twp. F. P. Kircher, aud.
Until Oct. 6 by Jay Co. Comrs., building and repairing 2 bridges, Wayne and Madison Twps. J. Bonifas, aud.

Ia., Algona—(Official)—Until Oct. 4, by E. H. Beardsley, aud. Kossuth Co. building bridge over Des Moines River; advertised in this issue.

Ia., Ft. Dodge—(Official)—Until Oct. 23, by City building rein.-con. viaduct, North 3rd St. W. L. Tang, clk.; advertised in this issue.

Minn., Minneapolis—Until Oct. 8, by Comrs. Hennepin Co., for bridge over Minnesota River on Lyndale Ave., 800 ft. long. Work includes 7.5 mi. roadway on Hennepin Co. side and 10 mi. on Dakota Co. side. Bids will be asked on 4 types of bridges. Hennepin Co. will sell $427,500 bonds for work and Dakota Co. $22,500. Toltz Eng. Co., 1410 Pioneer Bldg., St. Paul, engrs. Noted Sept. 13.

Kan., Hays—Until Oct. 1 by Ellis Co., building 60-ft. steel truss bridge. G. H. Brown, clk.

Kan., Lyndon—Until Oct. 3, by Osage Co., building 20 bridges and culverts. E. Olcott, clk. C. C. Jones, Burlingame, engr.

Kan., Westmoreland—Until Oct. 2, by Pottawatomie Co., building 5 rein.-con. bridges. J. B. Claywell, clk. I. E. Taylor, engr.

Mo., Jefferson City—See "Streets and Roads.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Me., Gardiner—City, Kennebec Co. and State let contract building highway bridge to T. Stuart & Sons, Newton, Mass., $55,900.

★Mass., Lynn—(Official)—R. J. Newsom, supt. water-works, let contract rein.-con. bridge and approaches at Ipswich River Sta. to J. W. Sheehan, 585 Weston Ave., Lynn, $10,095. Noted Sept. 6.

★N. Y., Albany—(Official)—W. W. Wotherspoon, supt. pub. wks., let contract Strauss Trunnion bascule bridge over Tonawanda Creek between Tonawanda and North Tonawanda, to Scherzer Rolling Lift Bridge Co., 53 West Jackson Blvd., Chicago. About $233,986. Noted Sept. 6.

Pa., Butler — (Official) — Pennsylvania Pub. Ser. Comn., Harrisburg, received low bids steel bridge with concrete abutments on Main St., from Independent Bridge Co., Beaver and Rebecca Sts., Pittsburgh, $198,687; C. M. Haggart Co., Pittsburgh, $207,278; Penn. Bridge Co., Beaver Falls, $220,596. Noted Sept. 6.

★Pa., Reading—Carpenter Steel Co., 3 Exeter St., let contract building 3 span rein.-con. bridge over Exeter St. to L. H. Focht & Son, 520 Court St., $150,000.

★Va., Fairmont—Marion Co. Comrs. let contract building 85-ft. rein.-con. bridge over Paw Paw Creek to Merydith Constr. Co., 215½ 4th St., Marietta, O., $11,000.

★S. C., Camden—Kershaw Co. let contract steel bridge over Wateree River to Austin Bros., 156 Greenwood Ave., Atlanta, Ga., $93,000. Noted Sept. 13.

★O., Dayton—See "Streets and Roads."

★Illinois — (Official) — State Highway Comn., Springfield, let contract building Sugar Creek Bridges Nos. 1, 2, 3 and 4, between Sheridan Twp., Logan Co. and Mason City Twp., Mason Co., to Decatur Bridge Co., East Eldorado St., Decatur, $12,287.

★Mo., Excelsior Springs—City let contract building bridges over Henrie Ave. and Fishing Creek to Western Bridge Co., Harrisonville. About $10,000. Noted Aug. 30.

★Ont., Oakville—City let contract building Tansley bridge, 600-ft. long, 18 ft. wide, to N. McLeod, Toronto, $60,000.

★Ont., Tansley—Council let contract rein.-con. bridge to N. McLeod, Ltd., Kent Bldg., Toronto, $60,000. Noted June 7.

STRUCTURAL STEEL WORK

Proposed Work

Neb., Center—See "Bridges."

BIDS DESIRED

W. Va., Charleston—See "Bridges."

Kan., Hays—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★S. C., Camden—See "Bridges."

REINFORCED CONCRETE

Proposed Work

R. I., Woonsocket—See "Bridges."

N. Y., Buffalo—See "Industrial Works."

N. J., Atlantic City—See "Miscellaneous."

N. J., Newark—See "Industrial Works."

Pa., Uniontown—See "Bridges."

Fla., Dunnellon—See "Industrial Works."

Neb., Gering—See "Bridges."

Neb., North Platte—See "Bridges."

N. D., Minot—See "Water-Works."

Wash., Port Orchard—See "Bridges."

N. S., Annapolis, Royal—See "Miscellaneous."

Ont., Ottawa—Office—See "Buildings."

Bids Desired

W. Va., Weston—See "Bridges."

Indiana—See "Bridges."

Ia., Ft. Dodge—See "Bridges."

Kan., Westmoreland—See "Bridges."

Cal., San Diego—See "Sewers."

Cal., Waterford — See "Excavation and Dredging."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Lynn—See "Bridges."

★Pa., Reading—See "Bridges."

★Va., Fairmont—See "Bridges."

★O., Dayton—See "Water-works."

★Mich., Grand Haven—See "Streets and Roads."

★Cal., San Diego—See "Miscellaneous."

★Cal., Woodland—See "Excavation and Dredging."

Ont., Tansley—See "Bridges."

STREETS AND ROADS

Proposed Work

R. I., Providence—City plans to curb portions President and Yale Aves., Bend, Crimea, Lawrence, Waterman, and Whitford Sts. M. H. Bronsdon, city engr.

N. Y., Buffalo—City plans to repave portion Humboldt Pkway. G. H. Norton, city engr.

N. J., Belvidere—Warren Co. plans paving road, from Bloomsbury to Stewartsville, 2½ mi., macadam. About $10,000.

N. J., Elizabeth—Bd. Freeholders, Union Co., plan state highway in portion Chestnut St., Roselle. About $60,000.

N. J., Paterson—Bd. Freeholders Passaic Co. plan to pave Rifle Camp Rd., macadam. G. Ferguson, co. engr.

N. J., Vailsburg—(Newark P. O.)—City plans to pave Sanford Ave., Grove St., and South Orange Ave.

Pa., South Brownsville — (Official) — Boro. plans grading and paving portions 2nd and 18th Sts.

Va., Bristol—(Official)—City to sell $20,000 bonds Sept. 29 for street improvements. C. Belew, clk. Noted Sept. 20.

Streets and Roads (Continued)

Va., Norfolk—Norfolk-Carolina Highway Assn., recently organized, plans to build highway to connect Norfolk and Elizabeth City, N. C. E. Wolcott, Seaboard National Bank Bldg., Norfolk, pres.

Va., Richmond—City plans to improve streets, roadbeds and sidewalks. About $50,000. C. E. Bolling, city engr.

W. Va., Charleston—Kanawha Co. sold $90,000 bonds to build hard roads in Loudon Dist. G. Copehaver, pres. co. court. Noted May 17.

W. Va., Stealey Heights—(Clarksburg P. O.)—City to sell $15,000 bonds Oct. 12 paving Stealey, Hartland, Magnolia and Lynn Aves., 4th and Traction Sts., brick and concrete. L. A. Hess, recdr. Noted Sept. 20.

S. C., Greenville—Greenville and Spartanburg Co. Comrs., Spartanburg, plan to build new road from Greenville to Spartanburg, via Reidville. A. Tull, Spartanburg, engr.

Georgia—State Highway Comn., Atlanta, plans to build Atlanta-Macon Highway. About $180,000. T. E. Patterson, chn.

Ga., Decatur—De Kalb Co. plans to improve Shallowford Highway leading to Camp Gordon in return for reconstruction of Peachtree Rd., which will be financed by U. S. Government.

Ga., West Point—City sold $20,000 bonds to pave streets. Noted June 28.

Ala., Mobile—Mobile Co. election soon to vote on $400,000 bond issue to build roads.

Miss,. Biloxi—City defeated $40,000 bond issue to improve streets. Noted Aug. 23.

La., New Iberia—City election Oct. 16 to vote on $75,000 bond issue to build good roads.

La., Shreveport—Caddo Parish Police Jury plans paving 5-mi. road. Address Parish Engr., Shreveport.

La., Thibodaux—Lafourche Parish election Oct. 23 to vote on $25,000 bond issue to build roads, Rd. Dist. No. 3.

Tenn., Murfreesboro—City plans to improve portion West Main St. About $25,000.

Tenn., Nashville—City election Sept. 27 to vote on $180,000 bond issue to open, widen, extend, and pave streets and alleys and $25,000 to build gutters. W. W. Southgate, city engr.

Ky., Poor Fork—See "Industrial Works."

O., Cincinnati—Cuyahoga Co. Comrs. passed ordinance to appropriate $152,131 for road improvements and $46.918 for bridges.

O., Cincinnati—City passed ordinance to pave portion Harrison Ave. F. Krug, city engr.

O., Elyria—See "Sewers."

O., Lima—City plans improving north and West High, Main, North Pierce, Baker and Buckeye Alleys, South West, Marmet and Dater Sts. About $40,000. C. Bryson, city engr.

O., Napoleon—Henry Co. sold $113,950 bonds to improve roads.

O., Youngstown—Council passed ordinance to issue $35,000 bonds to widen East Federal St. F. M. Lillie, city engr.

Ind., Evansville — Vanderburg Co. sold $11,000 bonds to improve roads. W. Thrall, co. treas.

Ind., Ft. Wayne—Allen Co. to sell $46,000 bonds to improve highways. W. R. Ranke, treas.

Ill., Belleville—St. Clair Co. plans to pave portions East St. Louis-Springfield Rd. About $15,100.

Ill., Butler—City plans to pave portions North Main, North Delaware, South Delaware, East Dakota and Lyon Sts.

Ill., Carlinville — Maconpin Co. election about Dec. 1 to vote on $155,000 bonds to complete St. Louis-Springfield hard road through county.

Ill., Edwardsville—Madison Co. election Nov. 20, to vote on $500,000 bonds for highways.

Ill., Galesburg—Knox Co. voted $10,512 bonds to meet equal amount alloted to county to build state-aid road.

Ill., Geneva—Bd. Supervs. Kane Co. to appropriate $93,000 paving Lincoln Highway from Cook Co. line to Fulton, 100 mi.

Ill., Lewistown — Fulton Co. Supervs. plan to build state aid road between St. David and Bryant.

Ill., Murphysboro—Jackson Co. defeated $340,000 bond issue to build roads. Noted Sept. 13.

Ill., Quincy—Adams Co. Supervs. voted $30,000 for street and bridge improvements. L. Boyer, supt. highways.

Ill., Springfield—Sangamon Co. election Nov. 6 to vote $500,000 bond issue to build state and Federal aid roads.

Ill., Toledo—Cumberland Co. election Oct. 23 to vote on $95,000 bond issue to pave National Rd.

Wis., Stevens Point—City soon lets contract paving Whiting St. and Seth Ave., concrete, 4800 ft., 15 ft. wide; $17,000 bonds sold for work. F. M. Playman, chn. st. comn. Noted Sept. 6.

Ia., Iowa City—City plans paving Newton Rd., 7800 sq.yd. brick or bituminous, 54 lin.ft. cement curb. About $26,000. S. M. Hands, engr.

Ia., Marion—Linn Co. plans paving and grading roads. About $276,000. H. R. Churchill, co. aud.

Ia., Waterloo — Bd. Supervs. Blackhawk Co. voted $100,000 for surfacing roads with gravel. This amount, together with state and federal aid, and other contributions will make about $244,000 available for road work during next 2 years.

Kan., Hutchinson — Reno Co. plans $3,000,000 bond issue to build 154 mi. hard surface roads, monolithic brick.

Mo., Linn—Osage Co. election Oct. 16 to vote on $200,000 bonds to build roads and bridges.

Ark., Ft. Smith—City soon lets contract paving North 10th and South 9th Sts., asphaltic concrete, 5-in. concrete base, 250-ft. concrete curb. About $20,000. W. H. Evans, city engr.

Ark., Magnolia—Columbia Co. Comrs. had plans prepared by State Highway Comn., Little Rock, 14 mi. roads, from here to Waldo and Lafayette Co. line. About $65,000.

Ark., Marion—Crittendon Co. plans to build 10-mi. road from Earle to Heafer, to be known as Improv. Dist. No. 2.

Ark., Waldron — Scott Co. Comrs. had plans prepared by State Highway Comn., Little Rock, for 32-mi. road to extend to Oklahoma state line, and Waldron and Sebastian Co. line. About $75,000.

Tex., Angleton — Brazoria Co., Freeport Rd. Dist. No. 23, voted $200,000 bonds to pave roads, tarvia.

Tex., Austin—See "Sewers."

Tex., Barstow—Ward Co. Rd. Dist. No. 1, election Oct. 13 to vote on $60,000 bond issue to build streets.

Tex., Corsicana—Navarro Co., Richland Rd. Dist., voted $80,000 bonds build highway to connect Richland with Colorado-Gulf Highway. Noted Aug. 30.

Tex., Corsicana — Navarre Co. Comrs. voted $200,000 bonds for roadwork in Rd. Dist. No. 1. Noted Aug. 30.

Tex., Daingerfield — Morris Co., Omaha Precinct, voted $35,000 bonds to build roads.

Tex., Eastland—Eastland Co. voted $130,000 bonds to build roads in Dist. No. 1. Noted Aug. 30.

Tex., Harlingen—City sold $10,000 bonds to build roads.

Tex., Jasper—Jasper Co. election Oct. 13 to vote on $250,000 bond issue for roadwork.

Tex., Palestine—Anderson Co., Rd. Dist. No. 2, voted $20,000 bonds to improve roads. Noted Aug. 30.

Tex., Port Lavaca—(Official)—Calhoun Co. Rd. Dist. No. 2 plans new election, Oct. 20, to vote on $75,000 bond issue to build and improve roads. Former election declared invalid. Noted Sept. 13.

Tex., San Angelo—Tom Green Co. election Oct. 20 to vote on $200,000 bond issue to improve roads. Noted Sept. 13.

Tex., Sinton — San Patrico Co. Comrs. plan road in Dist. No. 3. About $70,000. F. L. Clendening, secy. rd. dist.

Okla., Ardmore—Carter Co. voted $200,000 bonds for good roads.

Okla., Ardmore — Carter Co., Hewett Twp., to issue $70,000 bonds to build roads.

Okla., Ardmore — Council passed ordinance to issue $17.396 bonds to improve streets. A. B. Payne, city engr.

Okla., Holdenville — Hughes Co. Comrs. voted $73,000 bonds for roads, bridges and culverts in Dustin Twp.

Idaho, Bonners Ferry — Boundary Co. voted $70,000 bonds for highway work. Noted Aug. 23.

Idaho, Burley—City election Oct. [illegible] to vote on $42,000 bond issue for paving and other improvements. E. C. Davis, city [illegible]

Utah, Beaver—City election soon to vote on $50,000 bond issue to build roads.

Washington — State Highway Comn., Olympia, plans improving 27 mi. Blewett Pass with county and Federal aid. About $70,500 available for work now.

Washington — State Highway Comn., Olympia, rejected bids, paving 2 mi. Sunset Highway. Noted Aug. 30.

Wash., Aberdeen—City plans boulevard along Chehalis River. About $57,000. L. D. Kelsey, city engr.

Wash., Bellingham—Whatcom Co. Comrs. receive bids about January, paving 36-mi. road, 1- or 2-course concrete. About $100,000 to $500,000. Chas. Lindberry, co. engr.

Wash., Ellensburg—City plans paving 3 highways, from business district to city limits. About $35,000. A. Edwards, city engr.

Wash., Seattle—King Co. Comrs. rejected bids building Auburn-Enumclaw Highway No. 11-C. Noted Sept. 20.

Wash., Seattle—City had plans prepared paving portions 6th Ave., $37,966; Utah Ave. and Forest St., $48,793. A. H. Dimock, city engr. Noted Apr. 19.

Oregon—State Highway Dept., Salem, plans grading 10.8 mi. road between Myrtle Creek and Dillard, Douglas Co., 4.9 mi. Wolf Creek Hill, Josephine Co., both projects on Pacific Highway. About $173,648 and $83,600 respectively. U. S. Government aid to be asked for work.

Oregon — State Highway Comn., Salem, plans to build Lower Columbia River Highway, through Hood, Wasco and Sherman Cos. Comrs. will sell $500,000 of $6,000,000 bonds voted for highway work last June for this portion of highway. Noted Aug. 2.

Oregon — State Highway Comn., Salem, rejected bids, 33-mi. highway. Noted Aug. 23.

Ore., Canyon City—Grant Co. election soon to vote on $35,000 bond issue to build roads.

Ore., Gold Beach—Curry Co. plans to issue $100,000 bonds for highway work.

Ore., Toledo—Lincoln Co. election Oct. 2 to vote on $200,000 bond issue for road work. Noted Aug. 23.

Cal., Exeter—City having plans prepared by W. D. Watt, engr., paving Visalia Rd., Orange and Filbert Aves., South D, E, F and Pine Sts. About $5 per running foot pavement 50 ft. wide and $1.75 for pavement 16 ft. wide.

Cal., Los Angeles—City Council passed ordinance to improve portions Reseda, Ventura and Wilton Sts. A. C. Hansen, city engr.

Cal., Los Angeles—City rescinded contract let to W. M. Ledbetter, Pacific Electric Bldg., improving Sherman Dr. New bids. Noted Sept. 6.

Cal., Riverside—(Official)—Riverside Co. lets contract in January for 14 mi. graded and surfaced roads. R. W. Waterman, Blythe, engr., road dist. improv. Nos. 2 and 3.

Cal., San Diego—City had plans prepared paving portion Utah St., concrete. About $23,659. G. Cromwell, city engr.

Cal., Santa Barbara—Santa Barbara Co. lets contract about Oct. 1, improving ½ mi. road connecting Santa Rosa with State Highway.

Cal., Visalia—Tulare Co. having plans prepared following division of highway system: Tulare-Lindsay; Porterville-Worth; Lindsay-South; Merryman-Lemon Cove; Porterville-Woodville; Yettem-Elderwood; and Elderwood-Woodlake.

BIDS DESIRED

Massachusetts—(Official)—Until Oct. 2, by State Highway Comn., Boston, for 5000-ft. highway in Stockbridge Twp.

Conn., Hartford—(Official)—Until Sept. 28 by C. J. Bennett, state highway comr., building roads in various twps; advertised in this issue.

N. J., Jersey City—(Official)—Until Oct. 2, by Bd. Comrs. paving Central Ave., involving 30,035 sq.yd. asphalt and 20-in. c.i. water mains, cost, $105,643; also resurfacing and repaving Congress St., Belgian block. C. A. Van Kuren, city engr. Noted Sept. 20.

Streets and Roads (Continued)

N. J., Newark—Until Oct. 4, by Bd. St. & Water Comrs., paving portions Johnson Ave., asphalt. 6-in. concrete foundation. M. R. Sherrard, city engr.

N. J., Paterson—Until Oct. 24, by Bd. Freeholders Passaic Co. improving 2½ mi. Union Ave. from Paterson to Little Falls. G. Ferguson, co. engr.

N. J., Westfield—Until Oct. 1, by City improving East Broad St., bituminous macadam shoulders and treating pavement with liquid asphalt. A. W. Vois, city engr.

W. Va., Huntington—See "Sewers."

W. Va., Stealey Heights—(Clarksburg P. O.)—Until Oct. 12, by City paving, grading, and curbing portion Stealey and Duncan Aves. and Davis St. and alleys, brick and concrete. About $15,000. L. D. Mitchell, mayor. Noted Sept. 20.

Ky., Pikeville—Until Nov. 5, by City, for street paving. About $30,000.

O., Cincinnati—Until Oct. 2, by E. Von Bargen, purch. agt., for 30,000-gal. coal-tar bituminous binder for laying bituminous concrete pavements.

O., Cleveland—Until Oct. 3, by City, grading, draining, curbing and repaving 2 portions Woodhill Rd. R. Hoffman, city engr.

O., Elyria—(Official)—Until Oct. 3, by M. M. Wilcox, dir. pub. serv., paving portions Grant, Ohio and other streets. C. M. Theobald, city engr. Noted June 14.

Mich., Bad Axe—Until Oct. 1 by F. Bluette, clk., Fair Haven Twp., Hudson Co., 5-mi. trunk line macadam road, 16 ft. wide.

Ill., Granite City—(Official)—Until Sept. 29, by Morriss Realty Co., grading a Subdivision, 65,000 yd.; advertised in this issue.

Ill., Mendota—Until Oct. 8, by Bd. Local Improv., brick pavement, 5-in. concrete foundation and cement grout filler on various streets. About $36,100. C. Wedner, city clk.

Wis., West Allis—Until Oct. 6 by City grading Lincoln Ave. and George St. E. G. Orbert, city engr.

N. D., Bismark—Until Oct. 1, by C. L. Burton, city aud., 6550 yd. creosoted wood block, bitulithic or sheet asphalt paving.

Mo., Charleston—(Official)—Until Oct. 3, by City Clk., paving streets involving 9725 cu.yd. excav., 16,807 lin.ft. curb, 3126 sq. yd. 1-course concrete pavement, 27,683 sq. yd. 4-in. concrete base and 27,683 2-in. asphaltic concrete, wearing surface, 800 lin. ft. concrete header and changing 24 manhole tops in sanitary sewerage system. Noted July 5.

Mo., Jefferson City—(Official)—Until Oct. 5, by Cole Co. Court, for new public road leading to New Decatur Bridge; also 2 side-road connections, Sects. 25 and 26, Twp. 43, Range 14; road in Sect. 27, Twp. 44h, Range 11, including several concrete culverts and laying vitr.-pipe culverts. E. F. C. Harding, co. highway engr. Noted Aug. 9.

Cal., Modesto—Until Oct. 9, by H. Benson, clk. Stanislaus Co., building 16.67 mi. concrete pavement, 2.28 mi., Hickman-Thalheim Rd., 8.22 mi. Waterford Rd., and 5.57 mi. Oakdale-Waterford Rd.

Cal., Visalia—Until Oct. 5, by G. R. Prestidge, Clk., Tulare Co., building Dinuba-Kingsburg, Exeter-Merryman, Tulare-Paige and Porterville-Woodville divisions county highway system.

Ont., Finch—Until Oct. 1, by Dundas, Stormont and Glengarry Cos., Finch, for 60 mi. roads. J. G. Cameron, co. rd. supt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Me., Bangor—City let contract for 1-mi. stone-base gravel-surface road to M. Hughes, Bangor, $11,510.

Massachusetts—State Highway Comn., Boston, received low bid section highway in Raynham, from J. McCormick, 315 Taunton Ave., $10,848.

★Mass., Boston—City let contract surfacing 36,161 sq.yd. sheet asphalt, on South, Harvard, Beacon, North Russel and Bowdoin Sts., Brighton Ave. and Maverick Sq., to Bermudez Co., 246 1st St. About $111,542. Noted Sept. 20.

★Mass., Brighton — (Boston P. O.) — Dept. Pub. Wks., Boston, let contract artificial stone sidewalks on Brooks, Holton, Fairbanks, Mapleton and Market Sts., to J. F. Lynch, 47 Claybourne St., Dorchester, $13,899.

★Rhode Island—State Rd. Pub. Wks., Providence, let contract rebuilding section East Main Rd., to J. McCormick, 315 Taunton Ave., bituminous macadam, East Providence, $68,727. Noted Sept. 20.

N. Y., Albany—E. Duffey, state highway comr., 55 Lancaster St., received low bids building roads, various counties, as follows: Rd. No. 5590, Lewiston Hgts.-Lewiston, Niagara Co., 0.61 mi., F. E. Dean, Youngstown, $21,482; Rd. No. 1315, Cambria-Wilson, Niagara Co., 8 mi., Elmer J. Latus, Albany, $62,560; Rd. No. 5547, Whitesboro-Carey Corners, Oneida Co., 0.70 mi., Wm. P. McDonald Constr. Co., Lakeland, Fla., $20,732; Repair Contr. No. 1127, Road No. 5044, Mexico-Union Sq., Part 1, Oswego Co., Floyd H. Wells, Savannah, $10,359, Richard Hopkins, Troy, $10,845. Noted Sept. 6.

N. Y., New York—(Official)—M. M. Marks, boro. pres., received low bids regulating and paving West 123d St., sheet asphalt on concrete foundation, from Cleveland Trinidad Paving Co., Flushing, L. I., $10,204; Asphalt Constr. Co., 297 Madison Ave., $10,207; Davney Asphalt Co., 52 Vanderbilt Ave., $10,539.

★N. Y., Yonkers—City let contract paving portions South Bway., asphalt block, to J. Kearns, 50 Church St., New York City, $60,000. Noted Sept. 13.

★N. J., Lodi—Boro. let contract paving and curbing North Main St. to Dyer, Kane & Co., 12 Lexington Ave., Passaic, $12,124.

★Pa., Aspinwall—City let contract paving and improvements at Aspinwall Pumping Sta. to J. F. Casey, Oliver Bldg., Pittsburgh, $19,000.

★Pa., Hughestown — Boro. let contract paving Parsonage St. to O'Brien Bros., Avoca, $24,935.

★Pa., Phila.—Dept. Pub. Wks. let contract improving streets as follows: McNichol Paving Co., 1723 Cherry St., portion Northeast Blvd., $110,484; E. H. Vare, Lincoln Bldg., League Island Park, $45,900, Passyunk Ave., $10,217; Phila. Paving Co., and Cunningham Paving & Constr. Co., both of 1345 Arch St., portions Upland and 68th Sts.; Barbour Asphalt Co., Woolworth Bldg., New York City, Courtland, Louden, 57th, Warrington, Willows, and 7th Sts., $49,100; 28th St., Mack Paving & Constr. Co., Sedley St. Noted Aug. 30.

★Pa., Pittsburgh—See "Sewers."

★Va., Rustburg—Bd. Supervs. Campbell Co. let contract building 11-mi. bituminous macadam road to McKinney Bros., Inc., Peoples Bank Bldg.; J. R. Ford & Co., 1223 Foyd Ave., Virginia Constr. Co., Peoples Bank Bldg.; W. T. Jones, 216 7th St.; S. B. Bennington, 911 Cabell St., all of Lynchburg.

W. Va., Parkersburg — (Official) — City received low bids paving Ann, Spring and Charles Sts., from Graham Bros., 516 Julian St., George, 20th, 22nd and Covert Sts., Kennedy & Son, Parkersburg. Noted Sept. 6.

★N. C., Louisburg—City let contract 40,000 sq.yd. paving to A. G. Lassiter & Co., Oxford, $135,000. Noted Sept. 13.

★S. C., Spartanburg — Spartanburg Co. Highway Comn. let contract 8.8-mi. top soil road to Blankenship & Son. About $124,500 available for work.

★Ala., Birmingham—City let contract to Vibrolithic Constr. Co., Terminal Bldg., Dallas, paving portion Ballard Ave., $11,706; Englewood Ave., portions, $6981; Bishop Ave., $9171; Texas Bitulithic Co., Praetorian Bldg., Dallas, Tex., Holmes St., $23,946; Forney Ave., $26,746; Bramley-Lanham Paving Co., Knight St., $11,278; Standard Eng. Co., 113 Martin St., Dallas, Tex., 7th St., $11,786.

★Miss., Carthage—Leake Co., Edinburg Rd. Dist., let contract 10.78 mi. gravel road to Cunningham & Tate, Brooksville. Noted June 14.

★La., Amite — Tangipahoa Parish Rd. Dist. let contract 13.3 mi. gravel and dirt highway from Fluker to Mississippi state line to S. A. Gano, $70,000.

★La., New Orleans—City let contract shell road on portion Madrid St. and Franklin and Paris Ave. to H. Reynolds, Maison Blanche Bldg. Noted Aug. 23.

★Tenn., Cleveland—City let contract paving streets to West Constr. Co., 10th and Market St., Chattanooga, $72,130.

Tenn., Hohenwald—Lewis Co. Comn. received low bid 30-mi. road, involving 12,000 cu.yd. excav., from Humphrey & Schenderman, Hohenwald; $100,000 available for work. Noted Aug. 23.

★Ohio—State Highway Comn., Columbus, let following road contracts: Thos. Dalton, Winchester, Adams Co.; T. J. Connell, Cambridge City, Ind., 2 sections Hamilton-Middleton Rd., monolithic brick, Butler Co., $77,000 and $82,000 respectively; Delaware Blue Limestone Co., Delaware, Sect. "A," Delaware-Prospect Rd., $56,000; Wilson Engr. Co., Xenia, Hancock Co., $36,500; L. H. Young, West Austintown, Akron-Youngstown Rd., Mahoning Co., $25,000; Burnett & Christian, Rockford, Mercer Co., $30,000; B. Mango, Niles, Monroe Co., $12,000; J. A. Single, Zanesville, Muskingum Co., $15,000; J. S. Neff, Circleville, Lancaster-Circleville Rd., $22,000; L. Garrett, Kent, portion Akron-Youngstown Rd., concrete, $47,000; Brewer, Tomlinson & Brewer, Chillicothe, Ross Co., $43,000; I. Putnam, Van Wert, Piqua Rd., Shelby Co., rein.-conc., $23,000; Seiple & Wolfe, Youngstown, Sect. "G," Ravenna Rd., Stark Co., bitulithic macadam limestone top, $54,000; S. Baughman, Marysville, Union Co., $33,000; L. Smith, Leipsic, Allen Co., $25,000; Kelley Bros., Portsmouth, Jackson-Portsmouth Rd., Scioto Co., $25,000; J. C. Devine Co., Alliance, portion Lincoln Highway in Columbiana Co., Madison Twp., $108,000. Noted Sept. 13.

★O., Cincinnati—City let contract paving portion Maple Leaf Ave. to Kirchner Constr. Co., 221 West 9th St., $19,510. Noted Sept. 13.

★O., Dayton — City let contract paving East 3rd St., to E. Ryan, Springfield, $20,226; removal of bridge at canal, substitution of culvert, and paving Keowee St. to T. P. Strack, 31 Goodale Bldg., Cincinnati, $47,085.

★O., Fostoria—City let contract grading, paving, curbing and building sewers to Modern Constr. Co., Fremont; Brubaker & Peter, Fostoria; Bugler & Anderson, Fostoria; about $47,395.

O., Hamilton—City received low bids paving Main St. and Grand Blvd., from Andrews Asphalt Paving Co., Reutschler Bldg., Federal Asphalt Paving Co., 316 Reutschler Bldg., A. Wirtz Transfer Co., 5th and Maple Sts. Noted June 14.

★O., Newark—City let contract paving Neal Ave., Evans and St. Clair Sts., to Federal Asphalt Paving Co., 316 Reutschler Bldg., Hamilton, $23,376.

O., Springfield—City received low bids paving streets (a) sheet asphalt, (b) trinidad, (c) aztex or texico, (d) asphaltic concrete as follows: R. J. Kavanaugh, portion Kenton St., (a) $7878; (b) $7945. Stanton Ave., (a) and(b) $24,969; (c) $22,549; Fountain Ave., (a) $24,994; (b) $25,440; Southern Ave., (d) or (c) $5342. (b) $5465; Mulberry St., (c) $19,069; (b) $19,365; Western Ave., (a) or (c) $36,721; (b) $37,721; Grand Ave., (c) $16,132; (b) $16,696; (d) $13,207; J. McHugh, 1340 South Penn St., Phila., Kenton St., (c) $8125; (b) $8195; Mulberry St., (a) or (c) $18,929; (b) $19,299; Western Ave., (c) $37,363; (b) $33,913; Grand Ave., (a) or (c), $15,988; (b) $16,131; Caffrey & Cooney, portions Fountain Ave., (a) or (c) $24,994. Noted Sept. 6.

Ind., Indianapolis—City received low bid paving portion South Capitol Ave., from Marion Co. Constr. Co., 1600 South West St., $9.10 per lin.ft. asphalt and stratified limestone, $9.25, asphalt and granite curb, $9.60; brick and stratified limestone curb; $9.75, brick and granite curb.

★Ind., South Bend — City let contract paving Dubail Ave., Mexican asphalt concrete, to A. H. White Constr. Co., 1600 Ry. Ex. Bldg., $34,434. Noted Aug. 2.

★Mich., Detroit—Bd. Pub. Wks. let contract to Detroit Asphalt Paving Co., McGraw Bldg., paving, grading and curbing Maxwell Ave., asphaltic concrete, $19,425, Freer Ave., $12,875; F. Orath & Son, 309 Free Press Bldg., Lafayette Ave., $64,090; Dragoon Ave., 1-course concrete, $25,537; Otis Cement Constr. Co., 806 Hammond Bldg., paving various alleys, $17,800.

★Mich., Grand Haven—Ottawa Co. let contract 2-mi. concrete road, including grading, culverts, and 2 concrete bridges in Plainfield and Alpine Twps., to Terbeck & Bronkhorst, $31,994.

★Ill., Chicago—Cook Co. Comrs. let contract building Western Ave. Rd., Bloom and Rich Twps., to J. A. Sackley, 133 West Washington St., $14,125; Cicero Ave. Rd., Stickney Twp., to P. C. Sullivan, 105 Sawyer Ave., La Grange, $18,219.

Streets and Roads (Continued)

Ill., Elgin—(Official)—City received low bid paving Douglas Ave., 4500 sq.yd. asphaltic concrete, from McCarthy Improv. Co., 220½ Main St., Davenport, Ia., $9695; River St., 7450 sq.yd. brick, Illinois Hydraulic Stone and Constr. Co., $23,162. Noted Sept. 20.

★**Ill., Frankfort Heights**—(Official)—City let contract 20,000 sq.yd. 6-in. concrete paving to Western States Constr. Co., 782½ Brandeis Bldg., Omaha, $48,898. Noted Sept. 13.

★**Ill., Rockford**—City let contract paving portion Greenwood Ave., macadam, to F. K. Carrico, 1109 Kilburn Ave., $18,839.

★**Wis., Ashland**—City let contract paving West 9th St., bitulithic, to General Contg. Co., Plymouth Bldg., Minneapolis, $27,000.

★**Wis., Chippewa Falls**—Bd. Pub. Wks. let contract paving portions North Main and Willow Sts. to Cast Stone Constr. Co., Eau Claire. Noted Aug. 23.

★**Ia., Des Moines**—Polk Co. let contract paving 58th St., monolithic brick, to Akin & Flutter, Des Moines, $201,132.

★**Ia., Ottumwa**—(Official)—City let contract concrete paving to J. C. Blunk, Ottumwa, $2.40 per sq.yd.

★**Minn., Duluth**—City let contract paving portions Central Pl. to A. N. Nelson, Duluth, $11,292.

★**Kan., Great Bend**—(Official)—City let contract paving Williams Ave., 20,000 sq. yd. asphaltic concrete, to Watts & Amerman, Salina, $35,000. Noted Sept. 6.

★**Kan., Independence**—City let contract paving portions 3rd St., concrete base, 1 layer brick and asphalt filler, to J. K. Shinn, Neodesha, $60,256.

★**Neb., Ashland**—City let contract paving, to Abel Constr. Co., 318 Terminal Bldg., Lincoln, $39,920.

★**Neb., Central City**—City let contract paving in Dist. No. 2, asphalt, to E. D. Tyner Constr. Co., $25,000.

★**Mont., Butte**—City let contract to R. Metcalf, Butte, paving portions Main St., creosoted wood block, $23,868, Wyoming St., $15,882. Noted Sept. 6.

★**Mont., Ronan**—City let contract macadamizing and curbing streets and installing conduits to Markus & Covell, Ronan, $17,500.

★**Tex., Dallas**—City let contract to Vibrolithic Constr. Co., Terminal Bldg., paving portions Ballard, Englewood and Bishop Aves., $1.62 per sq.yd., Texas Bitulithic Co., Praetorian Bldg., Holmes St. and Forney Ave., $2.30 per sq.yd., Bramley-Lanham Paving Co., Knight St., $0.98 per sq.yd., Standard Eng. & Contg. Co., 113 Martin St., 7th St., $11,786.

★**Idaho, Wallace**—(Official)—City let contract paving in Dist. No. 7 to H. J. Kaiser, 312 Colby Bldg., Everett, Wash. About $12,000. Noted Aug. 30.

Washington—State Highway Comn., Olympia, received low bids 5-mi. Inland Empire Highway, from C. N. Pentecost, Walla Walla, $32,878, G. L. Stickler, Uniontown, $34,812. Noted Aug. 30.

Oregon—State Highway Comn., Salem, let contract road from Oregon City to Canby, 8 mi., to Oregon-Hassam Paving Co., Bd. Trade Bldg., Portland, $145,721.

★**California**—(Official)—State Highway Comn., Sacramento, let contract grading roads in San Diego Co. to W. M. Ledbetter, Pacific Electric Bldg., Los Angeles, $27,642; Shasta Co., Palmer & McBryde, Hooker & Lent Bldg., San Francisco, $59,541. Noted Sept. 20.

★**Cal., Richmond**—City let contract improving Standard Ave. to L. L. Page, 8th and Bissell Sts., $13,105.

★**Cal., San Bernardino**—(Official)—City let contract paving South Arrow Head Ave. to Highway Constr. Co., Highland; about 11c. per sq.ft., curbing 30c. per lin.ft. Noted Sept. 13.

★**Cal., San Jose**—(Official)—Santa Clara Co. let contract improving Bodfish Mill Rd., Dist. No. 1; Santa Clara and Alviso Rd., Dist. No. 4, to Kunze Contg. Co., Manx Hotel, San Francisco, $45,496. Noted Sept. 20.

Cal., San Jose—Santa Clara Co. received low bids improving San Aquino Rd., (a) topeka, (b) bitucrete, (c) oil macadam, from Raisch Improv. Co., Auzerais Bldg., (a) $22,245; E. M. Chadbourne, (b) $16,865; F. R. Ritchie, Chronicle Bldg., San Francisco, (a) $17,865; Western Constr. Co., (c) $16,600; B. Ransome, Grand Ave. and Harrison St., Oakland, (a) $20,800, (c) $16,584.

Cal., South Pasadena—(Official)—City received low bids paving Fremont Ave., concrete, from J. E. Haddock, 357 North Chester St., Pasadena, $20,369; J. M. Montgomery, Alhambra, $21,816; T. I. Breitenstein, 465 Van Wyck St., Pasadena, $22,980. Noted Sept. 13.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Pennsylvania—Pennsylvania R.R. plans to enlarge classification yards and local shops, also build 20 mi. new tracks, increase car-storage facilities, etc., in Columbia. About $3,000,000. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Ohio—H. L. Doherty & Co., 60 Wall St., New York City, plans building electric railway from Toledo to Ft. Wayne, Ind., via Waterville, Grand Rapids, Napoleon, Defiance and other cities.

New Mexico—G. Estes, Deming, N. M., and associates, made surveys for 450 mi. railroad from Columbus to Farmington.

Texas—Gulf & Northern Ry., recently incorporated by B. F. Bonner, 1900 Main St., R. F. Redfield, 816 Gray Ave., and G. E. Davidson, all of Houston, and others, plans 24 mi. railroad from Burkeville to Bleakwood.

California—Pacific Electric Ry., Los Angeles, plans 13-mi. extension from Redlands to Yucaipa. J. M. McMillan, Los Angeles, genl. mgr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Idaho**—Oregon-Washington R.R. & Navigation Co., Portland, let contract Pine Creek extension to Grant Smith & Co., Fernwald Bldg., Spokane, Wash., $400,000.

EXCAVATION AND DREDGING

Proposed Work

Ga., Athens—(Official)—Drainage—Beaver Dam D. D. No. 1 soon receives bids for district to drain 1600 acres. About $35,732. H. H. Hampton, comr. C. M. Straham, Athens, engr. Noted Sept. 13.

Ga., Athens—(Official)—Drainage—Clarke Co. soon lets contract building Shoal Creek D. D. No. 2 to drain 450 acres, involving 6½-mi. ditch, floating dipper dredge. R. E. Johnson, comr. W. D. Alexander, Charlotte, N. C., engr. Noted Sept. 13.

La., Monroe—Drainage—Quachita Co. election Nov. 20 to vote on $400,000 bonds to install system to drain 94,000 acres, involving 70 mi. ditches and 3,000,000 cu.yd. excav.

Minn., Madison—Ditch—Joint Bds. Comrs. of Lake, Minnehaha and McCook Cos. plan to build immense ditch to reclaim farm land in 3 counties. About $98,000. Address Clk., Lake Co., Madison.

Minn., Marshall—(Official)—Ditches—Lyon Co. soon lets contract constructing Co. Ditch No. 37, about $20,269; No. 38, $12,390 and No. 16, $39,356. O. H. Sterk, engr.

Minn., Marshall—(Official)—Ditch—Lyon Co. made surveys building Co. Ditch No. 29, all tile. About $50,000. O. H. Sterk, engr.

Minn., St. Peter—Ditch—Nicollet Co. will build Co. Ditch No. 29 to cost $13,000. W. H. Holtz, aud.

Wash., Seattle—Drainage—Carnation Products Co., Stuart Bldg., soon receives bids for system to drain 800 acres, involving 40,000 yd excavation and building of dyke About $12,000. C. H. Kiehl, Central Bldg., engr.

Wash., Seattle—Drainage—King and Pierce Co. Comrs., Tacoma, plan election Oct. 20 to vote on formation proposed joint drainage district to drain 14,000 acres, partly in King and Pierce Cos.

Cal., Bakersfield—Irrigation—Kern Co. Farm Bureau appointed committee to have charge of movement for impounding flood waters of Kern River to irrigate several hundred thousand acres in Kern Valley.

Cal., El Centro—Irrigation—Dir. Imperial Irrigation Dist. directed C. K. Clarke, ch. engr., to make surveys and report on feasibility of building canal to carry 1300 sec.-ft. from main canal at point near Hanlon Heading to point near Siphon Drop on U. S. R. A. canal in California; also for canal to carry 8000 sec.-ft. from main canal near Hanlon Heading to U. S. R. A. canal near Laguna. Noted June 7.

Cal., Susanville—Irrigation—Honey Lake Valley Irrigation Dist., Lassen Co., plans system to irrigate 33,150 acres. About $43.90 per acre. L. F. Dozier, secy. W. L. Wales, engr.

BIDS DESIRED

Ill., Pittsfield—Canals—Until Oct. 7, by Comrs. Sny Island Levee D. D., building 3½-mi. canals, 30-ft. bottom, involving levee and auxiliary side ditches and 358,500 cu. yd. excav. H. Koeller, comr.

Ia., Estherville—Ditch—Until Oct. 1, by Emmet Co., building D. D. No. 108, involving 57,640 cu.yd. 6- to 30-in. tile. J. J. Klopp, aud.

Minn., Marshall—Ditch—Until Oct. 8, by Lyon Co., building Judicial Ditch No. 16, involving 56,317 ft. 5- to 30-in. tile, $38,267; No. 37, 29,156 ft. 5- to 24-in. tile, $7601; No. 38, 29,861 ft. 5- to 24-in. tile, $11,655.

Minn., St. Cloud—Ditches—Until Nov. 9, by Stearns Co., building Co. Ditches Nos. 42 and 43. N. Thomey, co. aud.

Minn., Willmar—Ditch—Until Oct. 10, by S. Nelson, aud.; Kandiyohi Co., building Co. Ditch No. 40. Noted Aug. 23.

Cal., Waterford—(Official)—Irrigation—Until Oct. 20, by Waterford Irrigation Dist., constructing drops, flumes, checks, side wastes, spills and siphons, involving placing of about 135,000 ft. B. M. of timber, 240 cu.yd. concrete 1040 sq.yd. cement plaster lining, 610 lin.ft. metal flume, 552 lin.ft. 36-in., 2330 ft. 30-in., 500 ft. 16-in. and 300 ft. 12-in. concrete pipe. J. R. Browder, secy.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Ga., Statham**—(Official)—Drainage—Barbers Creek D.D., Barrow Co., let contract 10 mi. open ditch to Thompson & Moseley, Inc., Atlanta. About $18,781. Noted Sept. 13.

★**Fla., Tallahassee**—Excavation—Bd. Comrs. Everglades D. D., Leon Co., let contract 6,000,000 cu.yd. earth and rock excav. from Miami Canal and 1,500,000 cu. yd. from South New River Canal to Bowers Southern Dredging Co., 914 Amer. Natl. Bank Bldg., Galveston, Tex.

★**La., Abbeville**—Ditches—Vermilion Co. let contract building drainage ditches involving 475,000 cu.yd. excav. to Angers & Masterpay, Kaplan.

★**Ia., Clarion**—(Official)—Drain—Wright Co. let contract building Drain No. 167 to McHose Sand and Tile Co., Boone, $44,295; No. 172 to G. F. Widman, Webster City, $14,455. Noted Sept. 13.

★**Ia., Red Oak**—(Official)—Ditch—Montgomery Co. let contract building Drainage Ditch No. 1 to O. P. Herrick, 810 Obs Bldg., Des Moines, $53,000. Noted Sept. 13.

★**Minn., Madison**—Ditches—Lacqui Parle Co. let contract Ditch No. 44 to Slater & Walden Bros., Madison, $21,000; No. 4 to Kohler Contg. Co., Frazee, open work, $0.1017 per cu.yd. C. Nelson, tile, $25,250. Noted Aug. 23.

★**Minn., Moorhead**—(Official)—Ditch—Clay Co. let contracts building Co. Ditch No. 41 as follows: excav. to King & Eichmiller, Frazee, $34,981; bridges to Jardine & Anderson, Fargo, N. D., $9189. Noted Sept. 6.

★**Minn., Olivia**—Ditch—Renville Co. let contract building judicial ditch as follows: main ditch to Northwestern Drainage Co., Grand Rapids, Wis., 91c. per cu.yd., Sect. No. 1, Lawrence Constr. Co., Grand Rapids, 101c., Sect. No. 2, Rood Constr. Co., Grand Rapids, Wis., 101c., tile work, Kircher Bros., Olivia, $149,750.

★**Minn., Worthington**—(Official)—Ditch—Nolbes Co. let contract Judicial Ditch No. 10 to J. J. Parish, Worthington. About $17,485.

★**Cal., Modesto**—Irrigation—Modesto Irrigation Dist. let contract enlarging main canal to H. E. McCaulay, $26,875. Noted Sept. 6.

★**Cal., Woodland**—Irrigation—Reclamation Dist. No. 108, Yolo and Colusa Cos., let contract concrete intake at Wilkins Slough, clearing of slough and ditching to Pacific Dredging Co., Flatiron Bldg., San Francisco. About $40,000.

INDUSTRIAL WORKS

Proposed Work

R. I., Providence—Eastern Film Co., 1100 Elmwood Ave., plans to rebuild film plant. About $60,000.

Industrial **Work (Continued)**

R. I., Providence—Portsmouth Constr. & Drydock Co., recently incorporated with $500,000 capital stock, plans shipbuilding plant. W. C. Cabell, 36 Cranston St., C. Moore, 221 Thames St. and Walter Curry, Chapel Pl., all of Newport, incorporators.

N. Y., Brooklyn—R. Freedman, 4185 Fulton St., had plans prepared for 1-story, 157 x 220-ft. brick garage, Tilden Ave. About $50,000. E. C. Georgi, 4185 Fulton St., archt.

N. Y., Brooklyn—Humboldt Coal & Ice Co., 169 Meserole Ave., had plans prepared by L. F. J. Weiher, archt., 271 West 125th St., New York City, for 1-story, 125 x 127-ft. brick garage, Humboldt and Scholes Sts. About $75,000.

N. Y., Brooklyn — Rosevale Realty Co. plans 4-story garage. L. Rosenberg, 189 Montague St., pres. Volckening & Holler, 82 Wall St., New York City, archts.

N. Y., S. I., Milliken—Downey Shipbuilding Corp., 120 Bway., New York City, purchased site formerly owned by Milliken Bros. and plans 120x400-ft. machine shop. About $75,000. W. Downey, pres.

N. Y., Buffalo—Keystone Warehouse Co., 541 Seneca St., had plans prepared for 5-story, rein.-conc. warehouse on Jefferson St. About $387,000.

N. J., Newark—American Can Co., 129 Bway., New York City, having plans prepared, 3-story, 100 x 300-ft. rein.-con. addition to plant on McWhorter St.

N. J., Newark—Butterworth-Judson Co., Ave. R, had plans prepared for 1-story, 67 x 225 ft. and 2-story, 45 x 234-ft. additions to plant. About $130,000.

N. J., Newark — Newark Gear Cutting Machine Co., 69 Prospect St., had plans prepared for 4-story, 45 x 50-ft. addition to plant. H. E. Eberhardt, pres.

Pa., Chester—Chester Shipbuilding Co., Market St. Wharf, acquired entire block of property at Front and 2nd Sts. and plans to extend shops and shipways.

Pa., Columbia—See "Railways."

Md., Baltimore—Maryland Metal Cross Tie Co., Munsey Bldg., plans 1-story, 200x 400-ft. factory. About $100,000. T. W. Price, Woolworth Bldg., New York City, engr.

Va., Norfolk—American Chain Co., 430 Water St., subsidiary of American Chain Co., Bridgeport, Conn., plans new plant here. About $250,000.

Va., Norfolk—Linde Air Products Co., 30 East 42nd St., New York City, plans new plant here. Neff & Thompson, Seaboard Bank Bldg., Norfolk, archts.

Va., West Norfolk — Hampton Roads Shipbuilding & Drydock Co., 110 Bush St., Norfolk, acquired site here and plans new plant including shipways, machine shops, riveting works, etc. G. W. Feaga, pres.

Ga., Brunswick—See "Miscellaneous."

Fla., Dunnellon — Dunnellon Phosphate Co. plans rein.-conc. plant here. About $500,000.

Tenn., Nashville—See "Miscellaneous."

Ky., Poor Fork—United States Steel & Coke Co., 309 4th Ave., Cleveland, subsidiary of United States Steel Corp., plans to develop mines and build town here containing water supply, electric lighting and sewerage systems, sidewalks, tenements, schoolhouses and theaters. About $2,000,000.

O., Cleveland—American Auto Trimming Co., 880 East 72nd St., purchased site on Taft Ave. and plans 6- or 8-story factory.

O., Cleveland — G. H. Ritchie, Akron, plans to build automobile building at East 40th and Windsor Sts. About $75,000.

Ind., Richmond—Vulcan Spring Co., recently incorporated with $500,000 capital stock, plans to build 75x400-ft. factory. T. B. Jenkins, pres.

Mich., Detroit — Air-O-Flex Automobile Corp., 570 Penobscott Bldg., recently incorporated with $2,500,000 capital stock, plans to build new plant.

Mich., Detroit—Ben Siegel, c/o. Ben Siegel Co., 159 Woodward Ave., plans 10-story, 75x100-ft. garage. A. Kahn and E. Wilby, archts., Marquette Bldg., soon receives bids.

Ill., Chicago—Inter Ocean Refining Co., 171 North Green St., plans refinery and general distributing plant on 40-acre site at Joliet Rd and West 54th St. About $325,000.

Ill., Chicago—Union Specialty Machine Co., 300 West Kinzie St., plans 8-story factory.

Ill., Mattoon—Illinois Central R.R. plans roundhouse. About $100,000. A. D. Baldwin, 135 East 11th St., Chicago, ch. engr.

Wis., Green Bay—Oneida Motor Truck Co., Green Bay, soon lets contract 125 x 475-ft. plant, office building and transformer station. About $150,000. Foeller & Schober, 123 North Washington St., archts. Noted Sept. 20.

Wis., Madison—Cruiser Motor Car Co., 611-612 Gay Bldg., incorporated with $250,000 capital stock, plans factory. W. D. Curtis, 1102 Spraight St., pres.

Wis., Milwaukee — City plans to build power house at sewage disposal plant. About $700,000. T. C. Hatton, City Hall, ch. engr. sewerage comn.

Wis., Milwaukee — Cutler-Hammer Mfg. Co., 12th St. and St. Paul Ave., plans manufacturing and engineering building. About $250,000. H. J. Esser, Camp Bldg., archt.

Ia., Waterloo—Waterloo & Cedar Falls Union Mill Co. soon receives bids 3-story, 90x120-ft. grain elevator, warehouse and storage building. About $75,000 to $100,000. R. Leavitt, 4th and Water Sts., pres. M. B. Cleveland, 1st Natl. Bank Bldg., archt.

Minn., Minneapolis — Gas Products Co., 617 Plymouth Bldg., plans new carbon manufacturing plant. About $100,000.

Neb., Omaha—Omaha St. Ry. Co., Merchants' Natl. Bank Bldg., purchased site at 25th and Cummings Sts., and plans to build car house. About $100,000. A. H. Hogland, St. Paul, Minn., ch. engr.

Mo., Kansas City—Kansas City Light & Power Co., 1500 Grand Ave., has purchased 25-acre site on Missouri River, on which it plans to build a plant; main building, 266 x 600-ft., cost, $4,000,000, final structure, including equipment, $10,000,000, contract for work will soon be awarded. Sargent & Lundy, archts., Jackson and Michigan Blvds., Chicago, prepared plans.

Tex., Houston — Tidewater Milling Co., Houston, recently incorporated with $250,000 capital stock, plans new rice mill on ship canal. About $200,000. B. N. Garrett, 1110-1112 Union Natl. Bank Bldg., interested.

Tex., Texas City—Texas Resources Development Co., Texas City, increased capital stock from $4,400,000 to $6,000,000 and plans to build large iron and steel plant. H. H. Dickson, 1503 Fannin St., and R. S. Sterling Investment Co., 1603 Carter Bldg., both of Houston, interested.

Wash., Seattle—Alaska Gastineau Gold Mining Co., Alaska, representing eastern capital, plans large steel plant with subsidiary enterprises on Puget Sound. About $25,000,000. B. L. Thane, genl. mgr.

Wash., Seattle—Erickson Shipbuilding Co., Seattle, purchased 12-acre site on Duwamish Waterway and plans shipbuilding plant.

Wash., White Salmon — Northwestern Electric Co., Pittock Blk., Portland, Ore., plans large hydroelectric plant on White Salmon River. About $400,000. B. C. Condit, Portland, ch. engr.

Ore., Portland—Comn. of Pub. Docks soon lets contract for 1,000,000-bu. grain elevator. A. Hegardt, engr.

Cal., Los Angeles—Community Mfg. Co., Merritt Bldg., recently incorporated with $3,000,000 capital stock, plans new plant at San Fernando Blvd. and Southern Pacific R.R., including machine shop, assembling factory, drop forging plant, steel foundry, warehouse and office building.

Cal., San Diego — United States Steel Shipbuilding Co., Title Insurance Bldg., Los Angeles, recently incorporated with $3,000,000 capital stock by B. F. Graham, Title Insurance Bldg., and others, plans to build marine ways and machine shops here; also expend about $50,000 in dredging.

Cal., Wilmington—Wilmington Shipbuilding Co., 621 Investment Bldg., Los Angeles, leased property in east basin here, and plans new shipbuilding plant. About $500,000.

New Foundland, Harbor Grace — New Foundland Shipbuilding Co. had plans prepared by G. F. Pawling & Co., engrs., 1438 South Penn Sq., Phila., Pa., for shipbuilding plant. About $500,000.

Ont., Hamilton — Canadian Cotton Co., 352 McNab St., N., plans new factory addition. About $60,000.

Ont., London — H. J. Haley, St. Louis, plans to build rubber goods factory here. About $100,000.

Ont., Oshawa—Richmond Mfg. Co., 183 George St., Toronto, plans new plant here. About $60,000.

Ont., Sault Ste Marie—International Paper Co. plans to build pulp paper plant here. About $250,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Holyoke**—Deane Works, subsidiary of Worthington Pump & Machinery Corp., 200 Devonshire St., Boston, let contract 2-story, 150 x 154-ft. to Casper Ranger Co., 20 Bond St., Holyoke.

★**Pa., Phila.**—Baldwin Locomotive Wks., Broad and Spring Garden Sts., let contract 1-story locomotive shop addition on 15th St. to McClintic-Marshall Co., Pottstown. About $60,000.

★**Pa., Phila.**—Hires Condensed Milk Co., 913 Arch St., let contract 1-story, 150 x 642-ft. brick, steel and rein.-con. factory to J. L. Lewis, 38 Wall St., Binghamton. About $250,000.

Pa., Phila.—Philadelphia General Hospital, 34th St., received low bid for power plant from Standard Constr. Co., Drexel Bldg., $238,600.

***Pa., Phila.** — Taylor-Wharton Iron & Steel Co., 25th and Washington Sts., let contract 1-story, 120 x 280-ft. forge shop, 52nd St. to Crowell-Lundoff-Little Co., 1951 East 57th St., Cleveland. About $75,000.

★**Va., Glenlyn**—Appalachian Power Co., Bluefield, W. Va., let contract steam driven electric generating station on New River, between Virginia and Norfolk & Western R.R., to Hancock & Son, 1st Natl. Bank Bldg., Lynchburg. About $1,000,000. Noted May 10.

★**Ky., Clinton**—Illinois Central R.R. let contract new roundhouse and shop buildings to T. S. Leake & Co., 608 South Dearborn St., Chicago. About $100,000.

★**O., Akron**—W. J. Frank, I. O. O. F. Bldg., let contract 2-story, 70 x 200-ft. garage to Carmichael Constr. Co., 526 Hamilton Bldg. About $57,000.

★**O., Columbus**—Ohio State University let contract brick and steel powerhouse to E. H. Latham. About $85,000. Noted Aug. 16.

★**Mich., Detroit**—Ford Motor Co., Millen Rd., let contract blast furnaces on River Rouge, near here, to G. A. Fuller Co., 540 Penobscot St. About $20,000,000.

★**Mich., Detroit** — Standart Bros., Ltd., West Woodbridge St., let contract 6-story, brick, steel and stone warehouse to W. E. Wood Constr. Co., 1805 Ford Bldg.

★**Ill., Chicago**—American Cocoanut Butter Co., 2802-10 South Kilburn Ave., let contract 4-story, brick factory to Mueller Constr. Co., 179 West Washington St. About $50,000.

★**Wis., Milwaukee**—Globe Seamless Steel Tube Co., Burnham St., let contract 1-story, 50x480-ft. cooling-plant addition to J. D. Morrison, 625 69th Ave. About $50,000.

★**Wis., Milwaukee**—International Harvester Co., 606 South Michigan Ave., Chicago, let contract 2-story, 82x240-ft. core building to Dahlman Constr. Co., 912 Majestic Bldg. About $100,000.

★**Wis., Milwaukee** — Monarch Mfg. Co., Milwaukee, let contract new factory to Tullgren & Sons, 1616 Grand Ave. About $200,000.

★**N. D., Grand Forks**—Northern Packing Co., Grand Forks, let contract cooler and manufacturing plant, abattoir and power house to Splady, Albee & Smith, 1022 Plymouth Bldg., Minneapolis. About $225,000.

★**Utah, Ogden**—Globe Milling & Grain Co., Ogden, let contract grain elevator and flour mill to J. H. Waugh, Ogden. About $500,000.

★**Cal., Los Angeles**—H. L. Arnold, 601-9 West 7th St., let contract 2- and 3-story brick automobile building to Milwaukee Bldg. Co., 1006 Pabst Bldg., Milwaukee. About $425,000.

★**Cal., San Francisco**—Warehouse Investment Co. let contract 3-story, 137½ x 263-ft. warehouse to Lindgren & Co., Monadnock Bldg. About $175,000.

★**Ont., Hamilton**—Steel Co. of Canada, Harvey Lane, let contract coke oven plant to Wilputte Coke Oven Corp., 6 Church St., New York City. About $1,000,000 or $2,000,000.

★**Ont., Jordon Harbor**—Provincial Dept. Pub. Wks., let contract new power house to Tome Contr. Co., Kent Bldg., Toronto. About $50,000.

Industrial Work (Continued)

★Ont., London — Battle Creek Toasted Corn Flakes Co., Ltd., Dundas St., let contract mill and factory addition to Archibald & Holmes Excelsior Life Bldg., Toronto. About $75,000.

★Ont., Walkerville—Maxwell Motor Car Co., Woodward and Warrent Sts., Detroit. Mich., let contract new plant here to Canadian Bridge Co., Walkerville. About $140,000.

★Sask., Saskatoon—T. Eaton Co., Saskatoon, let contract brick and steel warehouse to Hazleton & Walm, 609 Electric Ry. Bldg., Winnipeg. About $125,000.

BUILDINGS

Proposed Work

N. H., Claremont—Hospital—G. H. Stowell Hospital plans. About $50,000. R. Clipston Sturgis, 120 Boylston St., Boston, archt.

Mass., Weymouth—Almshouse—Bd. Selectmen plan to rebuild almshouse recently destroyed by fire. About $50,000. J. W. Eldredge, supt.

Conn., Bridgeport—Lodge—Loyal Order of Moose plans to build at 651 State St. About $400,000.

N. Y., Albany—School—Bd. Educ. plans, 2-story. About $50,000. Fuller & Robinson, 95 State St., archts.

N. Y., Brooklyn—Nurses Home—Carson C. Peck Memorial Hospital having plans prepared by Ludlow & Peabody, archts., 101 Park Ave., New York, for 3-story, 60 x 100-ft., Troy Ave. and Crown St. About $50,000.

N. Y., Buffalo — Hospital — City Council plans $100,000 bond issue to complete West Farm Hospital.

N. Y., Glassboro—School—Bd. Educ. plans, 2-story. About $75,000. S. D. Beckett, 20 State St., pres. Moffett & Stewart, 30 North 3rd St., Camden, archts.

N. Y., Hague—Foxon Graphite Co., represented by J. Rodgers & Co., 25 Broad St., New York City, plans to build mining mill. About $500,000.

N. Y., New York—Home—Y. W. C. A. having plans prepared by L. E. Jallade, archt., 37 Liberty St. for home, Lenox Ave. and 124th St. About $300,000.

N. Y., New York—Theater—B. S. Moss, 729 7th Ave., plans, on Bway. and 181st St., with seating capacity of 3000.

N. Y., Patchogue—Clubhouse—Patchogue Lodge, No. 1323, B. P. O. E., plans 3-story, 60 x 150 ft., hollow tile, Main St. and Maple Ave. About $50,000. Tooker & Marsh, 101 Park Ave., New York City, archts.

N. Y., Peekskill — School — E. Benjamin, 13 East 25th St., New York City, plans agricultural school to include about 20 buildings. E. L. Shire, 373 4th Ave., New York City, archt.

N. Y., Poughkeepsie—Hotel—H. S. Duncan & Syndicate, Hotel Continental, 1450 Bway., New York City, plans brick and stone, Main and Washington Sts.

N. Y., Rochester — Fire House — City plans. About $50,000. F. X. Pifer, City Hall, secy. bd. contr. and supply. J. R. Tyler, 715 German Insurance Bldg., archt.

N. Y., Schenectady — School—Bd. Educ. plans addition to Edison School, South Center St. About $90,000.

N. Y., Syracuse—Business—W. A. Schuyler, City Bank Bldg., plans 3- or 4-story, 691 South Salina St.

N. Y., Whitesboro—High School—Bd. Educ. plans to build in Dist. No. 2. About $80,000. A. F. Lansing, Sherman Bldg., Watertown, arch.

N. J., Red Bank — School — Bd. Educ. plans, 2-story, 123 x 75-ft. brick school with 50 x 75-ft. extension. About $100,000. E. A. Arend, Kinmouth Bldg., Asbury Park, archt.

Pa., Chester — Clubhouse — Knights of Columbus plan, 3-story, 60 x 60 ft. About $50,000. Thos. Feely, secy. bldg. com. C. W. Brazer, Crozer Bldg., archt.

Va., Danville—Dormitory—Dan River Cotton Mills, Inc., plans, 4-story dormitory for girls. About $150,000. H. E. Spessard, Scholfield, mgr. Heard & Cardwell, Masonic Bldg., archts.

W. Va., Keystone—Administration State Preparatory School plans, 3-story. About $60,000. J. S. Lakin, 403 Capitol St., Charleston, pres. bd. contr. and supply.. A. Davis, 1713 Sansom St., Phila., archt.

W. Va., Morgantown — Infirmary — Monongahela Co. plans. About $50,000. J. C. Price, co. comr. E. Jacobs, Flemming Bldg., archt.

Ky., Poor Fork—See "Industrial Works."

O., Akron—Hotel—Park Hotel Co., Akron, had plans prepared by Mills & Millspaugh, archts., 49 North High St., Columbus, 10-story, fireproof. About $350,000.

O., Canton—Infirmary—Stark Co. election soon to vote on $100,000 bond issue to purchase land and erect infirmary.

O., Cincinnati—Court House — Hamilton Co. election Nov. 6 to vote on $500,000 to build courthouse. A. Reinhart, clk.

O., Cleveland — Bank — Cleveland Trust Co. plans 1-story, 37 x 90 ft. Perry Branch Bank. About $50,000. F. H. Goff, Euclid Ave. and East 9th St., pres. G. B. Post & Sons, Schofield Bldg., archts.

O., Cleveland—Bathhouse—City plans. About $300,000. A. Bernstein, dir. pub. ser.

O., Columbus — Aviation School — Ohio State University received $80,000 from State Emergency Bd., to build army aviation school buildings, including barracks, laboratory and machine gun range.

O., Columbus—Hospital—City having plans prepared by Richards, McCarty & Bulford, archts., Hartman Bldg., on Livingston Ave. About $175,000.

O., Defiance — Hall — Defiance College plans new building to be known as Tenzer Science Hall. About $50,000.

O., Defiance—School—City voted $200,000 to build new school.

O., Lima—Office—Hoover & Bond Co., 18 Pu. Sq., recently acquired site at 28-30 Public Sq. and plan 8-story building. About $126,000.

O., Sandusky — Hospital — Good Samaritan Hospital having plans prepared by E. F. Stevens, archt., 9 Park St., Boston, 3-story. W. H. Bishop, chn. bldg. com.

O., Toledo — Exchange — Bell Telephone Co., Toledo, plans branch exchange, Erie St. and New York Ave. About $70,000. A. J. Mellen, dist. mgr.

Ind., Indianapolis — Clubhouse — Indianapolis Athletic Club plans, 8-story, Vermont and Meridian Sts. About $500,000. H. L. Bass & Co., Hume-Mansur Bldg., archts.

Ind., Logansport—Bank and Office—Citizens' Loan & Trust Co. plans, 3-story. About $150,000. M. M. Minnick, 11 Market St., pres. C. J. Horn, Stettner Bldg., archt.

Ind., Terre Haute—Clubhouse—Trustees of State Normal School plan to build. About $100,000.

Mich., Flint — Hospital — Genesee Co. plans $100,000 bond issue for tuberculosis hospital.

Ill., Chicago — Sanitarium — Sisters of Sacred Heart having plans prepared, 8-story, 156 x 190-ft., Lakeview and St. James Sts. About $800,000. Worthem & Steinbach, 6235 South Halsted St., archts.

Ill., Chicago—School and Assembly Hall—Bd. Educ. plans, 3-story, 50x80-ft. and 100x125-ft. About $700,000. P. B. Coffin, 7 South Dearborn St., bus. mgr. A. F. Hussander, 7 South Dearborn St., archt.

Ill., East St. Louis—Monsanto Chemical Co., 1800 North 2nd St., St. Louis, Mo., plans plant. About $1,000,000. J. F. Queeny, pres. Brenneke & Fay, 1204 Fullerton Bldg., St. Louis, Mo., engrs.

Ia., Boone — Home — Boone Co. election Oct. 15 to vote on $95,000 bond issue to build home. J. R. Curry, aud.

Ia., Dyersville—Hospital—Bd. Supervs. will sell $75,000 bonds to build tuberculosis hospital.

Minn., St. Paul—Church—St. Lukes Congregation plans, 1-story, 128 x 280 ft. About $100,000. J. C. Byrne, 871 Summit Ave., pastor. J. T. Comes, 1005 5th Ave., Pittsburgh, Pa., archt.

Minn., Shakopee — Reformatory — State Bd. Control plans reformatory for women. About $100,000. J. R. Nichols, Minneapolis, archt.

Kan., Wichita—Newspaper and Office—J. Elmer Reese, 3005 East Douglas Ave., plans, 10-story, on North Market St. About $700,000.

Kan., Wichita—Schools—Bd. Educ. plans to vote on $125,000 bond issue to build schools.

Neb., Omaha—Schools—City plans election to vote on $2,000,000 bonds for new schools and additions to old ones.

Mont., Butte—City Hall and Auditorium —City plans $500,000 bond issue to build. V. H. Maloney, mayor.

Mo., Fulton—Chapel—Westminster College plans. About $50,000.

Tex., Amarillo—Hotel—Bd. of City Development plans to build. About $250,000. P. A. Whaley, secy.

Tex., Bryan—High School—City election Oct. 18 to vote on $90,000 bond issue to build school. Noted Aug. 30.

Colo., Colorado Springs — Bank — First Natl. Bank plans. About $300,000 to $500,000.

Colo., Denver — Church — Washington Park Community Congregation plans, [illegible]-story, 100 x 100-ft. About $50,000. Marion & Norton, archts., 215 Chamber of Commerce Bldg., soon receive bids.

Wash., Medical Lake—School—Custodial School plans. About $80,000. Julius Zittel, Jamieson Bldg., Spokane, archt.

Wash., Olympia — Office — State Capitol Comn. plans to build on new capitol site. About $400,000.

Wash., Spokane—Home—L. W. Hutton, Hutton Bldg., retained Whitehouse & Rice, archts., Hutton Bldg., to prepare plans for Orphans' Home near here. About $100,000 or $200,000.

Cal., Los Angeles—Terminal—Southern Pacific Co. (W. Hood, San Francisco, ch. engr.), Pacific Electric Ry., (J. McMillan, Los Angeles, genl. mgr.), and Salt Lake R.R., (H. C. Nutt, genl. mgr.), plan large joint terminal here. Under plans numerous grade crossings will be eliminated.

Cal., San Francisco—Theater—J. R. Saul, 502 Cement St., plans, rein.-con. About $85,000. W. H. Weeks, 75 Post St., archt.

Cal., Santa Barbara—Hotel—California Hotel Corp., 437 South Bway., Los Angeles, plans to build. About $600,000. D. M. Linnard, mgr. Myron Hunt, 1017 Hibernian Bldg., Los Angeles, archt.

Ont., Ottawa — Office — Blackburn Bros., Ottawa, soon let contract, 4-story, rein.-conc. About $60,000. Millson & Burgess, Union Bank Bldg., archts.

Man., Brandon — Asylum — Provincial Government rejected bids to build addition to Brandon Asylum. About $100,000.

BIDS DESIRED

N. Y., Buffalo—Library—Until Oct. 2, by Comr. Parks and Pub. Bldgs., for library, clinic rooms and public bathhouse, Amherst and Grant Sts. About $80,000. Noted June 28.

N. Y., New York — (Official) — Theater and Office—Until Oct. 15, by H. J. Knapp, archt., 116 East 16th St., for J. J. Schubert, 225 West 44th St. About $50,000. Noted Sept. 20.

N. J., Newark—Fire House—Until Oct. 2, by City, 2-story, Sanford Ave. and Palm St. About $100,000. F. Grad, Amer. Natl. Bank Bldg., archt. Noted July 26.

O., Oxford—Chemistry—Until Oct. 20, by Bd. Trustees, Miami University. F. L. Packard, 16 East Broad St., Columbus, archt.

Kan., Wichita—Church—Until Oct. 17, by O. A. Noyle, secy. bd. trustees, 125 North Rock Island Ave., 1-story, 100 x 130 ft. brick. About $85,000. J. Gaisford, Goodwyn Inst. Bldg., Memphis, Tenn., archt.

Neb., Clay Center—Court House—Until Oct. 2, by E. Frisch, co. clk. About $100,000. W. F. Gernandt, State Bank Bldg., Omaha, archt. Noted June 7.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Hospital—City let contract 2-story, brick addition to City Hospital, to John Bowen Co., 184 Dudley St., Roxbury. About $75,000. Noted Sept. 6.

★Mass., Springfield—School — Bd. Educ. let contract, 2-story, 78 x 171-ft., brick, to L. S. Wood, 14 Stockbridge St. About $150,000. Noted Sept. 20.

★Conn., Hartford—Office — Travelers Insurance Co., 700 Main St., let contract to Marc Elditz & Son, 30 East 42nd St., New York City. About $1,000,000.

★Conn., New Haven—Station—New York, New Haven & Hartford R.R. let contract, 4-story, to Thompson Starrett Co., 51 Wall St., New York City, $800,000. Noted Sept. 6.

N. Y., New York—(Official)—School—Bd. Educ. received low bids addition and alterations to P. S. No. 45, East 189th St., Bronx Boro., from Dennis E. Conners, 64 West 88th St., $81,650.

Buildings (Continued)

★N. Y., New York—Theaters—Selwyn Co., 1451 Bway., let contract 3 theaters on sites at 215 to 223 and 229 to 231 West 42nd St. to Solomon Bloom, 1476 Bway.

★N. Y., Poughkeepsie—School—Bd. Educ. let contract, 2-story, 140 x 160-ft. brick, to be known as Warring School, Smith St., to C. Van Aken, 191 Elmendorf St., Kingston, about $50,000. Noted June 28.

★N. J., Morristown—Hospital—Memorial Hospital let contract to Sturgis Bros., Trust Co. Bldg., and Reeve & Burr, Morris St. About $65,000. Noted Aug. 2.

★Pa., Abington—High School—Bd. Educ. let contract 2-story, 55 x 92-ft. addition to Harry Murphy, Abington. About $50,000. Noted Sept. 13.

★Pa., Phila.—School—Bd. Educ. let contract addition to school on 55th St., to Warren-Moore & Co., Colonial Trust Bldg. About $115,400.

★Pa., Phila. — Show Room — Overland Motor Co., 323 North Broad St., let contract 2-story, 33 x 115-ft., to Cramp & Co., 4 North 11th St. About $55,000.

★Miss., Columbia—Training School—Bd. Trustees of Mississippi Industrial Training School let contract 2 brick dormitories, administration building and superintendent's home, to Dabbs & Wetmore, 2220 2nd St., Meridian. About $55,000.

★O., Akron — Bank — Central Savings & Trust Co. let contract, remodeling, to Carmichael Constr. Co., 526 Hamilton Bldg. About $80,000.

★O., Harrod—School—Bd. Educ. let contract, brick, to L. G. Foltz & Sons, 621 Farwood Ave., Columbus. About $50,000.

★Ia., Iowa City—Hospital — State Bd. Educ. let contract to Theo. Stark & Co., Cedar Rapids. About $150,000. Noted Aug. 23.

★Ia., Letts—School—Bd. Educ. let contract 2-story, 70 x 120-ft. brick, to Max Midlestein, Cedar Rapids. About $52,400. Noted Sept. 6.

★Minn., Grand Rapids—Hospital—Itaska Co. let contract, 2-story, 36x121-ft., to Evenson-Utterberg Constr. Co., 741 Plymouth Bldg., Minneapolis. About $60,000.

★Minn., Tower—High School—Bd. Educ. let contract to Hugh Fawcett, Hunters Park, Duluth. About $61,999.

★Kan., Concordia — High and Grade School—Bd. Educ. let contract, 2-story, brick and rein.-con. to Rand Bros., Concordia. About $60,000. Noted Sept. 6.

★Neb., Omaha — Hotel — Commercial Realty Co., c/o. H. A. Wolf, 514 Ware Blk., let contract 10-story, 66x132-ft., rein.-con. and brick, on 16th and Harney Sts., to Selden-Breck Constr. Co., 537 Keeline Bldg. About $400,000.

★Mont., Butte—Y. M. C. A. let contract 6-story, 98x125-ft., rein.-con. and brick building to Nelson & Pederson, 309 Electric Power Bldg. About $181,453.

★Mo., Kansas City—Office—McPike Drug Co., 7th and Central Sts., let contract 5-story, 50 x 86-ft., brick, on 7th St., to Latimer & Benning, 612 Mass Bldg. About $50,000.

★Tex., San Antonio—Asylum—Bd. Mgrs. Southwestern Insane Asylum let contract 2-story, 116 x 231 ft. dining-room, 2-story, 39 x 94-ft. dormitory and 2-story, 54 x 94-ft. stable to Weston & Kroeger, West Crockett and Navarro Sts. About $145,000.

★Wash., Spokane—Store—Crescent Co., Spokane, let contract to Porter Bros., Old Natl. Bank Bldg. About $1,000,000.

FEDERAL GOVERNMENT WORK

Proposed Work

N. Y., Long Island City—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Sept. 12. Noted Sept. 20.

Wash., D. C.—Warehouse—U. S. Government will build large warehouse on site of old Southern Ry. freight yards, Maryland Ave. between 12th and 14th Sts.

BIDS DESIRED

R. I., Newport—Dispensary—Until Oct. 1, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., building at Naval Sta.

Pa., Ft. Mifflin—Mine Storage Building—Until Oct. 8, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash.

Pa., Phila.—Foundry, etc.—Until Oct. 15, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., building foundry, machine and electrical shop at Navy Yard.

Wash., D. C.—Steel Towers—Until Oct. 8, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., furnishing 2 200-ft. steel towers, at Naval Sta., West Indies.

Va., Farmville — Post Office — Until Oct. 30, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Fla., Pensacola—Concrete Road and Culvert—Until Oct. 1, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., at Naval Sta.

Fla., Pensacola—Seaplane Pier — Until Oct. 8, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., at Naval Sta.

La., New Orleans — Electric Traveling Crane—Until Oct. 1, by Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., furnishing for machine shop.

La., New Orleans—Levee Work—Until Oct. 4 by U. S. Engr. Office, Queen and Crescent Bldg., New Orleans, building 4,343,000 cu.yd. earthwork, Lower Tensas, Atchafalaya, Lafourche, Barataria, Pontchartrain and Lake Borgne Dists., advertised in this issue.

O., Kenton—Post Office—Until Nov. 1, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Colo., Denver — Excavators — Until Oct. 15, by U. S. Rec. Ser., Denver, furnishing dragline excavators. F. E. Weymouth, ch. of constr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I., Newport—Crane—Bureau Yards and Docks, Navy Dept., Wash., let contract furnishing 20-ton crane at power plant to Manning & Moore, 119 West 140th St., New York City, $18,950.

Conn., New London—Ordnance Storage Buildings, etc.—Bureau Yards and Docks, Navy Dept., Wash., received low bids, 5 ordnance storage buildings and 1 machine shop, at U. S. Submarine Base, (a) work complete, (b) net price 3 buildings, (c) net price machine shop complete from R. H. Arnold, Woodward Bldg., Wash., D. C., (a) $91,730, (b) $42,416, (c) $21,758; Austin Co., Union Ave., Bridgeport, (a) $106,910, (b) $52,350, (c) $24,946; Snare & Triest, Woolworth Bldg., New York City, (a) $107,660, (b) $49,800, (c) $32,800.

★Conn., New London—Power Plant Equipment—Bureau Yards and Docks, Navy Dept., Wash., let contract turbo-generators to General Electric Co., River Rd., Schenectady, N. Y., $94,800; boilers to Babcock & Wilcox Co., North Amer. Bldg., Phila., $69,511; pumps and fans to E. J. Smith, 30 Church St., New York City, $51,925; feed-water heaters to Natl. Pipe Bending Co., 110 River St., New Haven, $2400; condensing equipment and service heaters to Alberger Pump and Condenser Co., 140 Cedar St., New York City, $48,835; traveling cranes, screens and Monorail hoist to Carroll Electric Co., 714 12th St., Wash., D. C., $47,825. Noted Sept. 20.

★N. Y., Bay Shore—Timber Seaplane Hangar—Bureau Yards and Docks, Navy Dept., Wash., let contract, Naval Air Sta., to T. B. Thomas, 1st Natl. Bank Bldg., $13,287.

★N. Y., Brooklyn—Warehouses—Bureau of Yards and Docks, Navy Dept., Wash., let contract to Degnon Contg. Co., 68 Hunterspoint Ave., Long Island City. About $240,000.

★Pa., Phila.—Coal Handling Plant—Bureau Yards and Docks, Navy Dept., Wash., let contract to Guarantee Constr. Co., 140 Cedar St., New York City, $115,375.

Pa., Phila. — Dredging — Bureau Yards and Docks, Navy Dept., Wash., received low bids dredging at Navy Yard, from H. T. Taylor Co., Inc., 1515 Fidelity Bldg., Baltimore, 38c. per cu.yd., Amer. Dredging Co., Marine & Merchant Bldg., Phila., 42½c.

Va., Cape Henry—Building—Secy. Agriculture, Wash., received low bids, 3-story brick building for Weather Bureau, from R. E. Johnson, Virginia Beach, $18,609, time, 120 days; De Riso Bros., Weehawken, N. J., $18,988, 150 days; J. Seay & Co., Mercer Ave., Petersburg, Va., cost plus 7%, 160 days. Noted Aug. 30.

★Va., Norfolk — Coal-Handling Plant — Bureau Yards and Docks, Navy Dept., Wash., let contract to R. H. Beaumont, Drexel Bldg., Phila., $84,260.

★Va., Norfolk — Distributing System — Bureau Yards and Docks, Navy Dept., Wash., let contract outside tunnel and tunnel piping, also outside piping system to Carroll Electric Co., 714 12th St., Wash., D. C., $172,000 and $92,700 respectively; outside electrical conduit system and piping system for structural shop to H. C. Crook & Co., 2 Light St., Baltimore, $44,734 and $54,000 respectively. Noted Sept. 20.

MISCELLANEOUS

Proposed Work

Parks—Batavia, N. Y.—See "Sewers."

Elevated Railway — Brooklyn, N. Y. — Pub. Ser. Comn., 120 Bway., New York City, rejected bids building Route 49, Sect. 3, Culver Rapid Transit R.R., from point near Ave. X to Sheepshead Bay. Noted July 19.

Sea Wall—Atlantic City, N. J. — City plans to issue $350,000 bonds to build rein.-con. seawall near Longport, concrete piling base, about 1½ mi. long.

Elimination of Grade Crossings—Bellemead, N. J.—See "Bridges."

Parks—Lansford, Pa.—See "Sewers."

Sea Wall and Water Front Improvements—St. Augustine, Fla.—See "Bridges."

Garbage Incinerator—St. Clair Heights, Mich.—(Detroit P. O.)—See "Sewers."

Fire Alarm System — Austin, Tex. — See "Sewers."

Elimination of Grade Crossings—Los Angeles, Cal.—See "Buildings."

Marine Ways—San Diego, Cal.—See "Industrial Works."

BIDS DESIRED

Pier—New York, N. Y.—(Official)—Until Oct. 23, by W. W. Wotherspoon, supt. pub. wks., Capitol, Albany, building pier foot West 53rd St., Terminal Contract No. 38; advertised in this issue.

Station Finish—New York, N. Y.—Until Oct. 1, by Pub. Ser. Comn., 120 Bway., completion of construction and station finish of Brooklyn and Manhattan loop and 4th Ave. subway parts of Bway.-4th Ave. Rapid Transit R.R., Boros. of Brooklyn and Manhattan.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Wharf—Onset, Mass.—Town of Wareham let contract public wharf here to Frank Taylor, 190 Kempton St., New Bedford, $10,000.

★Dam—New Haven, Conn.—Park Bd. let contract at Mill River Park, to C. W. Blakeslee, 58 Waverly St., $68,000.

★Duct Line—Brooklyn, N. Y.—Pub. Ser. Com., 120 Bway., New York City, let contract duct line for part of Eastern Pkway., Rapid Transit R.R., to W. G. Cooper, Inc., 220 Bway., New York City, $38,697. Noted Sept. 13.

Subway—Buffalo, N. Y.—City received low bid subway under tracks Pennsylvania R.R. from Peckham Constr. Co., Mutual Life Bldg., $47,000.

★Riveting Tower—Phila., Pa.—Baldwin Locomotive Works, 15th and Spring Garden Sts., let contract 44 x 74 ft. to McClintic Marshall Co., Morris Bldg., $60,000.

★Tunnel—Columbus, O.—Ohio State University let contract to M. P. Streets, Columbus. About $115,000. Noted Aug. 16.

★Dam and Retaining Walls—Marshalltown, Ia.—City let contract, rein.-con., over channel north of river at Center St., to C. F. Reimer & Co., Marshalltown. About $18,700. Noted Aug. 30.

★Dam—San Diego, Cal.—City let contract cyclopean rein.-con. dam, Lower Otay site, to Wurster Constr. Co., Spreckles Bldg., $420,135. Noted Sept. 20.

★Pier—San Francisco, Cal.—State Board Harbor Comrs. let contract at foot Montgomery St., to Healy-Tibbitts Constr. Co., 9 Main St., $328,920. Noted Sept. 13.

★Dam—Bedford, Que. — Bedford Light Co., Ltd., plans to build across Pike River, by day labor. About $60,000. C. O. Jones, secy.

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until October 2, 1917.

Canal Improvements

STATE OF NEW YORK, OFFICE OF SUPERINTENDENT OF PUBLIC WORKS

Albany, N. Y., August 29th, 1917.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, October 2nd, 1917, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 167.

Oswego Canal—Section 1.

For constructing a bascule bridge below Lock No. 1 at Culvert street, Phoenix.

Sheets 1 to 8 inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y.; at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y.; at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds, co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the state for doing the work and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned the interests of the State will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

PROPOSALS

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue mailed the next day.

Bids received until October 2, 1917.

Three Span Slab Concrete Bridge

COUNTY CONTROLLER'S OFFICE

Reading, Pa., Sept. 12, 1917.

Sealed proposals will be received at this office up to 10 o'clock a.m. Tuesday, October 2nd, 1917, for the erection of a three span slab concrete bridge over the Saucony Creek at the Borough of Kutztown, Berks County, Pa. Plans and specifications can be had at the County Commissioners' office at Reading, Pa., for which a deposit of five dollars must be made, which will be refunded when the same are returned.

All bids must be accompanied with a certified check equal to 10% of the aggregate amount of the bid. The right is reserved to reject any or all bids.

CYRUS J. RHODE, County Controller.

PROPOSALS FOR SEAWALLS—U. S. Engr. Office, Boston, Mass.—Sealed proposals for construction of seawalls at Fort Warren, Boston Harbor, Mass., will be received here until 12 M., October 4. 1917, and then opened. Further information on application.

PROPOSAL FOR CONSTRUCTION OF WHARF EXTENSION—Office of U. S. Engineer, Newport, R. I.—Sealed proposals will be received here until 12 o'clock noon, October 6, 1917, and then opened, for construction of pile and timber extension to wharf at Fort Greble, R. I. Further information on application.

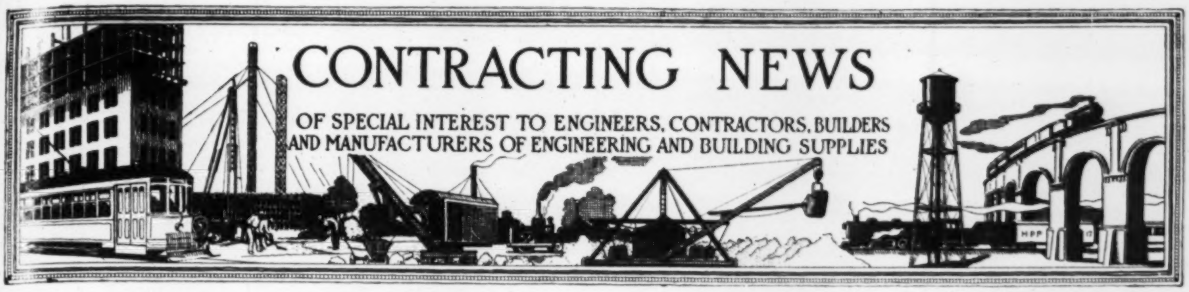
PROPOSALS

Bids received until October 9, 1917.

Pavement Reconstruction

Harrisburg, Penn.

Pennsylvania State Highway Department, Harrisburg, Penn.—Sealed proposals will be received at said office until 10 a.m., Oct. 9, 1917, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of 9878 linear feet of Vitrifield Block Pavement, 16 ft. wide, situated in East Taylor Township, Cambria County, and 11,070 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Jackson and East Taylor Townships, Cambria County, both on State Highway Route No. 52; 5900 linear feet of Reinforced Concrete and Vitrified Block Pavement, 16 feet wide, situated in East Bethlehem Township, Washington County, State-Aid Application No. 738, 19,318 linear feet of Vitrified Block and Reinforced-Concrete Pavement, 16 feet wide, situated in Cecil and North Strabane Townships, Washington County, on State Highway Route No. 108, and 16,852 linear feet of Vitrified Block and Reinforced-Concrete Pavement, 16 feet wide situated in South Fayette Township, Allegheny County, on State Highway Route No. 108; 11,857 linear feet of Reinforced-Concrete Pavement 16 feet to 20½ feet wide, situated in Hanover Township, Lehigh County, on State Highway Route No. 159; 5800 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Clinton Township, Butler County, State-Aid Application No. 417; 6537 linear feet of Reinforced-Concrete Pavement, 16 feet wide, situated in Abington, Upper Moreland and Upper Dublin Townships, Montgomery County, State-Aid Application No. 648; 7857 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Cornplanter Township, Venango County, State-Aid Application No. 681; 6562 linear feet of Reinforced-Concrete Pavement, 16 feet wide, situated in Moosic and Old Forge Boroughs, Lackawanna County, State-Aid Application No. 487 and No. 442, and 2540 linear feet of Vitrified Block Pavement, 16 feet wide, situated in East Huntingdon Township, Westmoreland County, State-Aid Application No. 324. Sealed prosopals also will be received until 10 a.m., Oct. 16, 1917, when bids will be opened and scheduled and contracts awarded as soon thereafter as possible for the reconstruction of 13,007 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Manor Township, Armstrong County, State-Aid Application No. 397; 6675 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Somerset Township, Somerset County, State-Aid Application No. 739; 2454 linear feet of Vitrified Block Pavement, 16 feet and 20 feet wide, situated in Bellefonte Borough, Centre County, State-Aid Application No. 456, and 18,083 linear feet of Vitrified Block Pavement, 16 feet wide, situated in Morgan and Franklin Townships, Greene County, on State Highway Route No. 268. Plans and specifications may be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh, Pa. Full particulars and information on application to J. Denny O'Neil, State Highway Commissioner.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by **heavy type**; declines by *italics.*

PIG IRON

Below are the present quotations with a comparison of a month and a year ago.

	Oct. 1, 1917	One Month Ago	One Year Ago
CINCINNATI			
No. 2 Southern foundry....	....	$49.90	$17.40
No. 2 Northern foundry....	....	56.26	20.26
NEW YORK			
No. 2X Northern foundry....	....	52.50	19.50
No. 2 plain Northern foundry	....	52.00	19.25
No. 2 Southern foundry†...	....	52.25	19.50
BIRMINGHAM			
No. 2 Southern foundry....	....	47.00	14.50
CHICAGO			
No. 2 Northern foundry....	*$33.00*	55.00	18.50
PITTSBURGH			
Bessemer iron*	*36.30*	52.95	22.95
Basic iron*	*33.00*	50.95	19.95

*These prices include the freight charge from the valley to the Pittsburgh district. †Delivered Tidewater, New York.

Note—On Sept. 24 the President approved the new schedule of steel prices, that of pig iron being set at $33. Cincinnati, New York and Birmingham are not quoting prices until the differentials have been determined by the Government.

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per 100 lb. f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	Oct. 1, 1917	One Year Ago	Oct. 1, 1917	One Year Ago
Standard bessemer rails.	$38.00 to 60.00	$33.00	$38.00	$33.00
Standard openhearth rails	40.00 to 60.00	35.00	40.00	35.00
Light rails, 8 to 10 lb..	83.00	50.00	95.00	43.00
Light rails, 12 to 14 lb.	82.00	49.00	95.00	42.00
Light rails, 25 to 45 lb.	75.00	47.00	95.00	40.00
Rerolled rails	75.00 to 80.00	....	....	....

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh					
	Oct. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
Standard railroad spikes	$7.00	$2.65	$5.00	$5.75	**$7.25**	$5.75
Track bolts	7.00 to 8.00	3.25	6.25	Premium	**8.80**	Premium
Standard section angle bars	**3.75** to **4.00**	2.00	4.50	Premium	4.65	Premium

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

	Material	7 In. x 9 in. by 8 Ft. 6 In.	6 In. x 8 in. by 8 Ft.
New York	Yellow Pine	**$1.32**	**$1.06 to 1.11**
St. Louis	No. 1 White Oak	1.00	.75
Chicago	White Oak	.97	.82
San Francisco..	Green	.97	.74
San Francisco..	Creosoted	**1.85**	**1.37**

PIPE

PIPE—The following discounts are for carload lots f.o.b. Pittsburgh, basing card in effect July 2, 1917, for iron and May 1 for steel:

Steel			Iron		
Inches	Black	Galvanized	Inches	Black	Galvanized
BUTT WELD					
¾ to 3.......	49%	35½%	¾ to 1½......	33%	17%
LAP WELD					
2	42%	29½%	2	26%	12%
2½ to 6......	45%	32½%	2½ to 4......	28%	15%
7 to 12.......	42%	28½%	4½ to 6......	28%	15%
13 and 14.....	32½%	....	7 to 12........	25%	12%
15	30%	....			
BUTT WELD, EXTRA STRONG PLAIN ENDS					
¾ to 1½.....	47%	34½%	¾ to 1½......	33%	18%
2 to 3........	48%	35½%			
LAP WELD, EXTRA STRONG PLAIN ENDS					
2	40%	28½%	2	27%	14%
2¼ to 4.......	43%	31½%	2½ to 4......	29%	17%
4½ to 6.......	42%	30½%	4½ to 6......	28%	16%
7 to 8........	38%	24½%	7 to 8........	20%	8%
9 to 12.......	33%	19½%	9 to 12.......	15%	2%

From warehouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded............	38%	42.8%	34.27%
3½ to 6 in. lap welded............	18%	38.8%	21.27%
7 to 12 in. lap welded............	10%	35.8%	21.27%
	Galvanized		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded............	22%	27.8%	19.27%
3½ to 6 in. lap welded............	List+20%	24.8%	13.27%
7 to 12 in. lap welded............	List	20.8%	6.27%

Malleable fittings, Class B and C, from New York stock sell at 5 and 5% from list prices. Cast iron, standard sizes, 34 and 5%.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York							
	Oct. 1, 1917	1 Mo. Ago	One Yr. Ago	Birmingham	Chicago	St. Louis	San Francisco	Dallas
4 in.	$68.50	$68.50	$34.50	$63.00	$68.50	*$63.00*	**$76.00**	**$72.00**
6 in. and over	65.50	65.50	31.50	60.00	65.50	*60.00*	**73.00**	69.00

Gas pipe and 16-ft. lengths are $1 per ton extra.

CLAY DRAIN TILE—The following prices are per 1000 lin.ft.:

	New York					
Size, In.	Oct. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$23.00	$18.40	$15.00	$26.25	**$21.55**
4	51.00	32.45	20.70	18.00	34.75	**30.60**
5	65.00	45.00	28.75	23.00	48.75	....
6	90.00	56.55	40.25	27.00	67.50	**50.02**
8	130.00	95.80	74.75	55.00	....	**90.09**

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York					
Size, In.	Oct. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$0.093	$0.078	.....	$0.09	$0.075	$0.1032
4	.093	.078	.....	.10	.10	.1032
5	.1395	.117	.....	.135	.125	.1548
6	.1395	.117	$0.12	.15	.15	.1548
8	.217	.182	.165	.21	.225	.215
10	.3255	.273	.23	.315	.30	.301
12	.4185	.351	.33	.405	.40	.387
15	.558	.468	.50	.54	...	.559
18	.775	.650	.75	.75	.75	.731
20	.93	.780	.90	.90	.962	.86
22	1.24	1.04	1.13	1.20	...	1.118
24	1.395	1.17	1.28	1.35	1.375	1.29
27	2.08	1.755	1.30	...	...	1.935
30	2.304	1.944	1.70	...	...	2.365
33	3.06	2.61	2.25	...	...	3.05
36	3.485	2.972	2.50	...	...	3.44

	Boston	St Paul	Kansas City	Denver	Los Angeles	Seattle
3	*$0.099*	$0.084	$0.10	$0.07	$0.06	$0.075
5	*.1485*	.126	.135	.12	.10	.225
8	*.231*	.175	.18	.19	.18	.4125
12	*.4455*	.315	.36	.31	.32	1.75
24	*1.485*	1.35	1.35	1.14	1.125	.....
36	**3.69**	2.83	3.25	2.10	....	.....

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices in tank cars 8000 gal. minimum f.o.b. places named:

	Oct. 1, 1917 Gallon	One Month Ago Gallon
New York, 40-50% asphalt................	...c.*	...c.
New York, 60-70% asphalt................	...c.*	...c.
New York, dust layer....................	...c.*	...c.
New York, binder	...c.*	...c.
St. Louis, 40-50c% asphalt..............	**6c.**	5c.
Chicago, 15-20% asphalt	6½c.	6½c.
Chicago, dust layer	8½c.	8½c.
Chicago, binder	12½c.	12½c.
Dallas, 40-50% asphalt..................	**7c.**	6c.
Dallas, 60-70% asphalt..................	**8c.**	7c.
Dallas, 75-90% asphalt..................	**9c.**	8c.
San Francisco, 75-95% asphalt.........	$1.90 bbl. (42 gal.)	$1.90 bbl.

*Road oils continue to be extremely scarce in New York.

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	$30.00	....
Chicago	Mexican	24.00	20.00
St. Louis	Texaco or Mexican........	22.50	19.50
St. Louis..............	Standard	21.00	12.00
San Francisco	California	**16.50**	**13.50**
Dallas	Texaco and Mexican......	....	**25.00**
Seattle................	....	18.00	....
Denver.................	California	21.00	....
Denver.................	Trinidad	31.00	....
Kansas City	Trinidad	26.37	....

PAVING STONE—

		Oct. 1, 1917
New York	Manhattan	$2.50 sq.yd.
	Other boroughs	2.25 sq.yd.
Boston	5-in. granite	2.55 sq.yd.
Chicago	About 4x8x4 dressed........	2.25 sq.yd.
	About 4x8x4 common........	1.80 sq.yd.
St. Paul...........	Sandstone	1.65 sq.ft.
San Francisco	Basalt block 4x7x8	57.75 per M
Kansas City	Limestone	2.00 sq.yd.

FLAGGING—

		Oct. 1, 1917
New York	Bronx	$0.17 sq.ft.
	Manhattan	.18 sq.ft.
	Queens, 5 ft. square	.19 sq.ft.
	5x20-in. cross-walk	.30 sq.ft.
Chicago	18 in. wide	.75 lin.ft.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$2.00
New York	4	16	2.25
Chicago	4	16	1.85
Chicago	City specifications		1.70
St. Louis	3½	16	1.80
Seattle	4	16	1.50
Kansas City	4	16	**2.50**
St. Paul	Minneapolis specifications		2.00

CURBING—Prices per linear foot are as follows:

New York	5 x 16	$0.45
	5 x 20	.50
Chicago	6 x 18	.60
St. Louis	5x18 square edge	.72
San Francisco	5 x 16	.75
	5 x 20	.85

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

		Gravel				Sand	
		1½ In.		¾ In.			
	Paving	Oct. 1, 1917	One Yr. Ago	Oct. 1, 1917	One Yr. Ago	Oct. 1, 1917	One Yr. Ago
New York	....	$1.25*	$1.00	$1.35*	$1.10	$0.50	$0.50
Chicago	....	1.40	.90	1.40	.90	1.40	.85
St. Louis	....	1.08	.70	1.08	.70	1.08	.60
Dallas	....	1.50	....	1.50	....	**1.35**	....
San Francisco	....	1.00	1.25	1.00	1.25	1.00	1.20
San Francisco	....	1.00	1.00	1.00	1.00	1.00	1.00
Seattle	....	.55	....	.55	....	.55	....
Boston	....	1.50	....	1.60	....	.80	....
St. Paul	....	1.10	....	1.40	....	.50	....
Kansas City	....	2.00	....	2.25	....	.60	....
Denver	....	1.40	....	1.40	....	.95	....
Los Angeles	....	.85	....	.85	....	**.35**	....

*Nominal.

Fine White Sand—St. Louis:

Pacific............$5.00 per ton Ottawa............$7.00 per ton

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In.		¾ In.	
	Oct. 1, 1917	One Year Ago	Oct. 1, 1917	One Year Ago
New York	**$1.15**	$0.90	$1.25	$1.00
Chicago	1.40	.90	1.40	.90
St. Louis	1.35	1.00	1.35	1.00
Dallas	*1.41*	....	1.49	....
San Francisco	1.00	1.25	1.00	1.25
Boston	1.40	....	1.40	....
St. Paul	1.00	....	1.10	....
Kansas City	1.60	....	1.70	....
Denver	1.40	....	1.40	....
Los Angeles	.95	....	**1.00**	....
Seattle	1.10	....	1.10	....

LIME—Warehouse prices:

	Hydrated per Ton		Lump per 300-Lb. Barrel	
	Finished	Common	Finished	Common
New York	$16.50	....	$2.10	....
Chicago	15.00	12.00	1.90	....
St. Louis	12.00	....	....	10.75
Dallas	20.00	15.00	....	....
San Francisco	18.00	....	1.65	....

ROSENDALE NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., including bags:

New York $1.15

30c. allowed for bags.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags:

	Oct. 1, 1917	One Month Ago	One Year Ago
New York	$222	$2.22	$1.72
Jersey City	2.16	2.16	1.60
Boston	2.77	2.77	1.92
Chicago	2.21	2.21	1.86
Pittsburgh	2.31	2.31	1.81
Cleveland	2.44	2.44	1.94
Detroit	2.40	2.40	1.95
Indianapolis	2.38	2.38	1.99
Toledo	2.40	2.40	1.99
Milwaukee	2.33	2.33	1.98
Minneapolis	2.48	2.48	2.13
Duluth	2.51	2.51	2.06
Peoria	2.33	2.33	1.98
Cedar Rapids	2.48	2.48	2.09
Davenport	2.40	2.40	2.04
St. Louis	2.45	2.45	1.85
Denver	3.20	3.20	...
San Francisco	2.30	2.30	2.30
Dallas	**2.40**	2.15	...
Los Angeles	**2.30**	2.30	...
New Orleans	...	2.54	...
Kansas City	2.44	...	...
St. Paul	**2.58**	2.48	...
Seattle	2.65	...	...

TRIANGLE MESH REINFORCEMENT—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.89	$0.92	$0.93	$0.94	$1.06	1.27
049	0.049	1.13	1.18	1.18	1.20	1.34	1.63
068	0.068	1.42	1.47	1.49	1.50	1.68	2.04
093	0.093	1.82	1.89	1.91	1.92	2.17	2.62
123	0.126	2.31	2.39	2.42	2.44	2.74	2.96
153	0.153	2.75	2.86	2.88	2.91	3.27	3.32
180	0.180	3.16	3.27	3.31	3.34	3.76	....
245	0.245	4.17	4.33	4.36	4.41	4.96	5.65
287	0.287	4.82	5.00	5.04	5.10	5.72	6.94
336	0.336	5.58	5.80	5.85	5.92	6.66	....
PLAIN 4-IN. x 8-IN. MESH							
036P	0.036	.69	.71	.72	.73	.82	
053P	0.053	.97	1.01	1.02	1.03	1.16	
072P	0.072	1.26	1.30	1.32	1.33	1.50	
097P	0.097	1.62	1.68	1.70	1.71	1.93	
049R	0.049	.97	1.01	1.02	1.03	1.15	
067R	0.067	1.26	1.30	1.32	1.33	1.50	
089R	0.089	1.62	1.68	1.70	1.71	1.93	

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and width in rolls 150-, 200- and 300-ft. lengths.

Galvanized runs about 10% higher than plain.

EXPANDED METAL LATH—Prices per 100 yd. for painted are as follows:

Carload

		New York					
Gage	Weight	Oct. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$31.00	$18.00	$31.00	$34.00	$29.00	[illegible]
26	250	32.05	19.00	32.00	35.00	30.25	
25	300	33.15	20.00	33.00	....	....	35.00
24	340	34.25	21.00	34.00	37.00	33.00	36.00
22	450	36.45	24.00	36.00	....	....	

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING—The following quotations are per 100 lb.:

ROLLED FROM BILLETS

		Warehouse					
		New York					
In.	Mill Shipment	Oct. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
¾ and larger	*	$5.10	$3.35	....†	$4.50	**$6.50**	$4.75
⅝	*	5.15	3.45	....†	4.55	**6.55**	4.80
½	*	5.20	3.50	....†	4.60	**6.60**	4.85
⅜	*	5.35	3.75	....†	4.75	**6.75**	5.00
¼	*	5.60	4.10	....†	5.00	**7.00**	6.00

*Mill quotations on actual specifications.

†No quotations; market nominal on Government price.

ROLLED FROM RAILS

	Dallas	Chicago
¾ in. and larger	$4.75	$4.50
⅝	4.80	4.55
½	4.85	4.60
⅜	5.00	4.75
¼	6.00	5.00

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common			Paving	
	Oct. 1, 1917	One Month Ago	One Year Ago	Brick	Block
New York	*$8.25*	$8.50	$7.00	**$32.00**	**$38.00**
Boston	13.25	13.25	....	....	25.00
Chicago	8.00	8.00	6.00	16.00	24.00
St. Louis, salmon	8.00	8.00	7.75	18.00	....
St. Louis, selectel	10.00	10.00	10.50	....	....
Denver	8.00	8.00	....	....	14.00
Los Angeles	*6.50*	7.50	....	....	28.00
San Francisco	10.00	10.00	10.00	....	....
Dallas	**8.60**	8.10	....	22.00	22.50
New Orleans	....	9.00	....	....	....
Kansas City	11.00	11.00	....	....	20.00
St. Paul	8.70	....	....	....	27.00
Seattle	9.00	....	....	....	28.75

HOLLOW TILE—Hollow building tile price per block in cents:

	New York				
	Oct. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco
4x12x12	$0.0925	$0.070	$0.079	$0.054	$0.0825
6x12x12	.1295	.098	.12	.066	.11
8x12x12	.15725	.119	.135	.09	.1275
10x12x12	.185	.140	.16	.15	.20
12x12x12	.23125	.1750	.20	.18	.22

	4x12x12	8x12x12	12x12x12
Boston	$0.0957	$0.171	$0.2266
St. Paul	.055	.153	.138
Kansas City	*.0585*	.1125	.1575
Denver	.09	.17	.25
Los Angeles	.055	.10	.165
Seattle	.06	.10	.16

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

		New York					
	*Pittsburgh	Oct. 1, 1917	1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in.	(*$3.00*)	$5.25	$3.35	$5.05	$5.00	$7.75	$6.00
Channels, 3 to 15 in.	(*3.00*)	5.25	3.35	5.05	5.00	7.75	6.00
Angles, 3 to 6 in., ¼ in. thick	(*3.00*)	5.25	3.35	5.05	5.00	7.75	6.00
Tees, 3 in and larger	(*3.00*)	5.30	3.40	5.05	5.05	7.75	6.00
Plates	(*3.25*)	10.00	4.00	10.05	10.00	**10.50**	9.00

*Government price.

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

		Warehouse				
	Mill, Pittsburgh	New York	Chicago	St. Louis	San Francisco	Dallas
¾ in. and larger	$5.25	$7.00	$5.50	$5.55	$7.15	$8.50
CONE HEAD BOILER						
¾ in. and larger	5.35	7.10	5.60	5.65	7.25	8.60
⅝ and $\frac{11}{16}$	5.50	7.25	5.75	5.80	7.40	8.65
½ and $\frac{9}{16}$	5.85	7.60	6.10	6.15	7.75	9.00

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply		2-Ply		3-Ply	
	c.l.	l.cl.	c.l.	l.cl.	c.l.	l.cl.
No. 1 grade	$1.15	$1.40	$1.45	$1.60	$1.75	$1.90
No. 2 grade	1.10	1.25	1.25	1.40	1.50	1.65

Asbestos asphalt-saturated felt (14 lb. per square) costs $6.50 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $1.85 per roll in carload lots and $2.10 for smaller quantities.

Shingles, red and green slate finish, cost $4.75 per square in carloads, $5 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York or Chicago:

	Carload Lots	Less Than Carload Lots
Tar felt (14 lb. per square of 100 sq.ft.)	$61.00	$62.00
Tar pitch (in 400-lb. bbl.)	15.00	16.50
Asphalt pitch (in barrels)	29.00	30.50
Asphalt felt	60.00	62.00

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

	Large Lots, Pittsburgh	St. Louis	Chicago	San Francisco	New York
Blue Annealed					
No. 10	*8.00*	10.05	10.00	11.00	10.00
No. 12	*8.05*	10.10	10.05	11.05	10.05
No. 14	*8.10*	10.15	10.10	11.10	10.10
Black					
Nos. 18 and 20	*7.80*	10.15	9.80	11.07	10.30
Nos. 22 and 24	*7.85*	10.20	9.85	11.12	10.35
No. 26	*7.90*	10.25	9.90	11.12	10.40
No. 28	*8.00*	10.35	10.00	11.57	10.50
Galvanized					
No. 10	*8.50*	10.95	10.70	....	10.80
No. 12	*8.60*	10.95	10.70	12.15	10.90
No. 14	*8.60*	10.95	10.70	12.15	10.90
Nos 18 and 20	*8.90*	11.15	11.00	12.45	11.25
Nos. 22 and 24	*9.05*	11.30	11.15	12.59	11.55
No. 26	*9.20*	11.45	11.20	12.74	11.70
No. 28	*9.50*	11.75	11.50	13.03	12.00

LINSEED OIL—These prices are per gallon:

	New York		Cleveland		Chicago	
	Oct. 1, 1917	One Year Ago	Oct. 1, 1917	One Year Ago	Oct. 1, 1917	One Year Ago
Raw in barrels	*$1.23*	$0.73	$1.30	$0.77	$1.27	$0.75
5-gal. cans	*1.33*	.83	1.40	.87	1.37	.85

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red				White	
	Oct. 1, 1917		1 Year Ago		Oct. 1, 1917	1 Yr. Ago
	Dry	In Oil	Dry	In Oil	Dry and In Oil	Dry and In Oil
100-lb. keg	*12.25*	*12.50*	10.50	11.00	*12.00*	10.50
25- and 50-lb. kegs	*12.50*	*12.75*	10.75	11.25	*12.25*	10.75
12½-lb. keg	*12.75*	*13.00*	11.00	11.50	*12.50*	11.00
1- to 5-lb. cans	*14.25*	*14.50*	12.50	12.50	*14.50*	12.50

LUMBER*—Price per M in carload lots:

Square Edge and Sound Green

	Southern Pine				Yellow Pine	
	New York		Chicago		St. Louis	
	20 Ft. and Under	22-24 Ft.	20 Ft. and Under	22-24 Ft.	20 Ft. and Under	22-24 Ft.
3x 4 to 8x 8	$32.75	$33.75	$30.75	$31.75	$27.75	$28.75
3x10 to 10x10	32.75	38.75	35.75	36.75	32.75	33.75
3x12 to 12x12	41.75	42.75	39.75	40.75	36.75	37.75
3x14 to 14x14	43.75	44.75	41.75	42.75	38.75	39.75
3x16 to 16x16	46.75	47.75	44.75	45.75	41.75	42.75
3x18 to 18x18	51.75	52.75	49.75	50.75	46.75	47.75
4x20 to 20x20	56.75	57.75	54.75	55.75	51.75	52.75

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

*Prices from Lumberman's Bureau.

Rough Douglas Fir, No. 1 Common—More than carload lots in San Francisco:

Size in Inches	15 Ft. and Under	16 to 24 Ft.	25 to 32 Ft.
3 and 4x4	$24.00	$25.50	....
3 and 4x6 and 8	24.00	24.50	$25.50
6x6 and 8x8	24.50	25.50	25.50
3 and 4x10	24.00	25.50	26.50
6 and 8x10	25.00	26.00	27.00
3 and 4x12	24.00	25.50	26.50
6 and 8x12	25.50	26.50	26.50
10 and 12x12	25.00	25.00	27.00
3 and 4x14	25.00	27.00	28.00
6 and 8x14	26.50	27.50	27.50
7 and 9x14	27.50	28.50	28.50
10 and 12x14	26.00	26.00	28.00

Yellow Pine—Dallas. Price per M:

2x4 to 2x12—12 to 16 ft. long	$32.50
2x4 to 2x12—10, 18 and 20 ft. long	35.00
2x4 to 2x12—22 and 24 ft. long	37.50
4x4, 4x6, 6x6, 8x8, 3x8	37.50
8x10, 10x10, 3x10	40.00
12x12, 3x12	40.00

	8 x 8-In. x 20 Ft. and Under				12 x 12-In., 20 Ft. and Under	
	Y.P.	Fir	Hemlock	Spruce	Y.P.	Fir
Boston	....*	....*	....	$40.00	....*	....*
Kansas City	$39.00	*$34.00*	*$34.00*	....	$45.00	*$34.00*
Seattle	21.00	21.00	21.00	21.00	21.00	21.00
Los Angeles	....	30.00	30.00	....	....	30.00
San Francisco	....	24.00	24.00	....	....	24.00
St. Paul	....	38.00	31.50	....	....	43.00
Denver	....	30.00	....	27.50	....	32.00

	1-In. Rough, 10 In. x 16 Ft. and Under			2-In. T. and G. 10 In. x 16 Ft.	
	Y.P.	Fir	Hemlock	Y.P.	Fir
Boston	....*	....*	....	....*	....*
Kansas City	*$43.00*	*$43.50*	*$42.00*	*$51.00*	....
Seattle	21.00	21.00	21.00	21.00	$21.00
Los Angeles	30.00	30.00	....	....	....
San Francisco	....	24.00	24.00	....	24.00
St. Paul	....	51.00	34.00	59.00	37.50
Denver	....	30.00	30.00	....	30.00

***Market demoralized, tending upward.**

NAILS—The following quotations are per keg from warehouse:

	Pittsburgh, Mill	St. Louis	Denver	Chicago	San Francisco	Dallas
Wire	$4.00	$4.00	$4.00	$4.45	$4.60	$4.45
Cut	4.65	5.00	5.00	4.60	6.15	....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	21.5	New Orleans	30.7
Buffalo	11.6	New York	19.5
Chicago	18.9	Pacific Coast (all rail)	75.0
Cincinnati	15.8	Philadelphia	18.5
Cleveland	10.5	St. Louis	23.6
Denver	68.6	St. Paul	32.9
Kansas City	43.6		

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. barrel	$0.045	....
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.03	$0.0375
Soda ash, in 400-lb. bbl.	.05	.0375
Liquid chlorine	.175	.16

Lime is quoted separately, on p. 140.

CONTRACTORS' MISCELLANEOUS SUPPLIES

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Oct. 1, 1917	One Month Ago	One Year Ago
$4.50 to $5.00	$4.50 to $5.00	$2.50 to $2.60

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York	St. Louis	Chicago	San Francisco
Galvanized	10—2½ %	10—2½ %	10—2½ %	10%
Bright	20—2½ %	20—2½ %	20—2½ %	15%

MANILA ROPE—For rope smaller than ⅝-in. the price is ¼ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅝-in., 8 ft.; ¾-in., 6; ⅞-in., 4⅓; 1-in., 3½; 1⅛-in., 2 ft. 10 in.; 1¼-in., 2 ft. 4 in. Following is price per pound for ⅝-in. and larger, in 1200-ft. coils:

Boston	$0.34	Kansas City	$0.33½
New York	.33½	Los Angeles	.30
Chicago	.31½	Seattle	.33½
St. Paul	.34	Denver	.34

EXPLOSIVES—Price per pound in small lots at cities named:

	Low Freezing	Gelatin			Black Powder
	20%	40%	60%	80%	
New York	......	$0.26½	$0.34½	......	$2.50*
Boston	......†	......†	.36¼	$0.43¾	....
Kansas City	$0.20	.26¼	.33¼	.43¼	....
New Orleans	......	.25¼	.30¼	......	....
Los Angeles	.19	.25	.32¼	......	....
Seattle	.37	.49½	.63½	.83½	....
Chicago	.18¾	.22¾	.32¼	.42	....
St. Paul	.20	.26¼	.33¼	......	2.55*
St. Louis	.16¼	.20¼‡	.29½	.39½	2.15*
Denver	.19	.25¼	.32¼	.42¼	....
Dallas	.25	.29	.39	.49	....

*25-lb. kegs. †No local demand. ‡45%.

POLES—Prices on Western red cedar poles:

	New York 72-82	Chicago 52-62	St. Louis 52-62	Denver 33-42
6 in. by 30 ft	$5.59	$4.94	$4.94	$4.32
7 in. by 30 ft	7.40	6.60	6.60	5.80
7 in. by 35 ft	10.70	9.60	9.60	8.55
8 in. by 35 ft	12.20	10.90	10.90	9.65
7 in. by 40 ft	12.35	11.00	11.00	9.75
8 in. by 40 ft	13.75	12.15	12.15	10.65
8 in. by 45 ft	18.20	16.20	16.20	14.30
8 in. by 50 ft	21.85	19.45	19.45	17.15

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York	
	Oct. 1, 1917	One Month Ago
Heavy melting steel scrap	$28.50 to 29.50	$27.50 to 28.50
No. 1 railroad wrought	39.00 to 40.00	39.00 to 40.00
Stove plate	20.00 to 25.00	18.00 to 20.00
No. 1 machinery cast	30.00 to 31.00	30.00 to 31.00
Machine shop turnings	18.00 to 19.00	16.00 to 18.00
Cast borings	20.00 to 21.00	19.00 to 20.00
Railroad malleable cast	32.00	30.00 to 32.00

	Chicago	
	Oct. 1, 1917	One Month Ago
No. 1 railroad wrought	$36.00	$36.00
Stove plate	17.25	17.25
No. 1 machinery cast	25.00	25.00
Machine shop turnings	17.00	17.00
Cast borings	17.00	17.00
Railroad malleable cast	30.00	30.00

	St. Louis Price Delivered	
	Oct. 1, 1917	One Month Ago
No. 1 railroad wrought	*$31.50*	$33.00
Stove plate	16.00 to 17.00	16.50
No. 1 machinery cast	*21.00* to *22.50*	23.00
Machine shop turnings	*12.00* to *14.00*	14.50
Cast borings	*13.00* to *14.00*	14.00
Railroad malleable cast	*25.00* to *26.50*	27.00

Proposals

For Proposals Advertised See Pages 56 to 59 inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Oct. 10.	Polk, Pa.	Sept. 20
	Adv. Sept. 20 and 27.	
Oct. 12.	Pender, Neb.	Oct. 4
Oct. 16.	Caldwell, Kan.	Oct. 4
Oct. 19.	Akron, O.	Oct. 4
	Adv. Oct. 4.	

SEWERS

Oct. 8.	Stratford, Conn.	Sept. 20
	Adv. Sept. 20.	
Oct. 11.	Cleveland, O.	Oct. 4
Oct. 12.	North Bergen, N. J. (Weehawken P. O.)	Oct. 4
Oct. 13.	Cuyahoga Falls, O.	Sept. 27
Oct. 14.	Pleasantville, N. J.	Sept. 27
Oct. 16.	Wabash, Minn.	Sept. 27
Oct. 17.	Grosse Point, Ill.	Oct. 4
	Adv. Oct. 4	
Oct. 18.	Santa Barbara, Cal.	Oct. 4
Oct. 25.	St. Joseph, Mich.	Oct. 4
	Adv. Oct. 4.	

BRIDGES

Oct. 6.	Indiana	Sept. 27
Oct. 8.	Minneapolis, Minn.	Sept. 27
Oct. 8.	Challis, Idaho	Oct. 4
Oct. 8.	Highland Park, N. J.	Oct. 4
Oct. 8.	Nez Perce, Idaho	Oct. 4
Oct. 8.	Woodbridge, N. J.	Oct. 4
Oct. 9.	Walker, Minn.	Sept. 20
Oct. 9.	Okanogan, Wash.	Oct. 4
Oct. 10.	Cleveland, O.	Oct. 4
Oct. 10.	Germantown, O.	Oct. 4
Oct. 12.	Somerville, N. J.	Oct. 4
Oct. 13.	Weston, W. Va.	Sept. 27
Oct. 15.	Tallahassee, Fla.	Oct. 4
Oct. 15.	California	Oct. 4
Oct. 16.	Tampa, Fla.	Oct. 4
Oct. 16.	Glenville, W. Va.	Sept. 27
Oct. 17.	Butler, Pa.	Oct. 4
	Adv. Oct. 4.	
Oct. 20.	Pennsylvania	Sept. 20
Oct. 20.	Charleston, W. Va.	Sept. 27
Oce. 23.	Ft. Dodge, Ia.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	

STREETS AND ROADS

Oct. 8.	California	Sept. 20
Oct. 8.	Mendota, Ill.	Sept. 27
Oct. 8.	Louisiana	Oct. 4
Oct. 8.	St. George, S. I., N. Y.	Oct. 4
Oct. 9.	Pennsylvania	Sept. 20
	Adv. Sept. 20 to Oct. 4.	
Oct. 9.	Modesta, Cal.	Sept. 27
Oct. 10.	Brooklyn, N. Y.	Oct. 4
Oct. 10.	Little Rock, Ark.	Oct. 4
Oct. 11.	Newton, N. J.	Sept. 20
	Adv. Sept. 20 and 27.	
Oct. 11.	Oneonta, Ala.	Sept. 13
Oct. 12.	Ohio	Oct. 4
Oct. 12.	Stealey Heights, W. Va. (Clarksburg P. O.)	Sept. 27
Oct. 13.	Wedowee, Ala.	Sept. 20
Oct. 15.	Newark, N. J.	Sept. 13
Oct. 16.	Cape May, N. J.	Sept. 6
Oct. 16.	Pennsylvania	Sept. 20
Oct. 16.	Billings, Mont.	Oct. 4
Oct. 16.	Johnson, Tenn.	Oct. 4
Oct. 22.	Clarendon, Ark.	Oct. 4
Oct. 24.	Paterson, N. J.	Sept. 27
Oct. 24.	Santa Barbara, Cal.	Oct. 4
Nov. 5.	Pikeville, Ky.	Sept. 27

EXCAVATION AND DREDGING

Oct. 6.	Lawrenceville, Ill.	Oct. 4
Oct. 8.	Marshall, Minn.	Sept. 27
Oct. 8.	Belvue, Kan.	Oct. 4
Oct. 9.	Albany, N. Y.	Sept. 13
	Adv. Sept. 13 to Oct. 4.	
Oct. 9.	Boone, Ia.	Oct. 4
Oct. 10.	Willmar, Minn.	Sept. 27
Oct. 10.	Lafayette, Ind.	Sept. 20
Oct. 12.	Gaylord, Minn.	Oct. 4
Oct. 15.	Willmar, Minn.	Sept. 13
Oct. 15.	Havana, Ill.	Oct. 4
Oct. 16.	St. Peter, Minn.	Oct. 4
Oct. 19.	Mankato, Minn.	Oct. 4
Oct. 20.	Waterford, Cal.	Sept. 27
Oct. 22.	Elbow Lake, Minn.	Oct. 4
Oct. 22.	Rockport, Ind.	Oct. 4
Oct. 24.	Lesueur Center, Minn.	Oct. 4
Nov. 9.	St. Cloud, Minn.	Sept. 27

BUILDINGS

Bids Close		See Eng. News-Record
Oct. 9.	Cincinnati, O.	Oct. 4
Oct. 15.	New York, N. Y.	Sept. 27
Oct. 15.	Beaumont, Tex.	Oct. 4
Oct. 17.	Wichita, Kan.	Oct. 4
Oct. 18.	Red Bank, N. J.	Oct. 4
Oct. 20.	Oxford, O.	Sept. 27
Oct. 23.	Ft. Wayne, Ind.	Oct. 4
Oct. 23.	Smith Center, Kan.	Oct. 4
Oct. 24.	Abilene, Kan.	Oct. 4
Nov. 25.	Middletown, Mass.	Oct. 4
Dec. 1.	Norfolk, Va.	Sept. 13

FEDERAL GOVERNMENT WORK

Oct. 6.	Newport, R. I.	Sept. 13
	Adv. Sept. 13 to Oct. 4.	
Oct. 8.	Pensacola, Fla.	Sept. 27
Oct. 8.	Ft. Mifflin, Pa.	Sept. 27
Oct. 8.	Washington, D. C.	Sept. 27
Oct. 8.	New Orleans, La.	Oct. 4
Oct. 8.	Indian Head, Md.	Oct. 4
Oct. 8.	Philadelphia, Pa.	Oct. 4
Oct. 12.	Bad Axe, Mich.	Sept. 13
Oct. 15.	Denver, Colo.	Sept. 13
	Adv. Sept. 13.	
Oct. 15.	Waynesboro, Va.	Sept. 13
Oct. 15.	El Paso, Tex.	Sept. 20
	Adv. Sept. 20.	
Oct. 15.	Philadelphia, Pa.	Sept. 27
Oct. 15.	Denver, Colo.	Sept. 27
Oce. 15.	El Paso, Tex.	Sept. 27
Oct. 15.	Ft. Mifflin, Pa.	Oct. 4
Oct. 15.	Detroit, Mich.	Oct. 4
	Adv. Oct. 4.	
Oct. 23.	Andalusia, Ala.	Sept. 20
Oct. 24.	Bakersfield, Cal.	Sept. 20
	Adv. Sept. 20 and 27.	
Oct. 26.	Mt. Carmel, Ill.	Sept. 20
Oct. 28.	Waterloo, N. Y.	Sept. 20
Oct. 30.	Key West, Fla.	Sept. 6
	Adv. Sept. 6 and 13.	
Oct. 30.	Farmville, Va.	Sept. 27
Oct. 31.	Brooklyn, N. Y.	Oct. 4
Oct. 31.	Hollidaysburg, Pa.	Oct. 4
	Adv. Oct. 4.	
Nov. 1.	Kenton, O.	Sept. 27
Nov. 1.	Detroit, Mich.	Oct. 4
	Adv. Oct. 4.	
Nov. 2.	Cincinnati, O.	Oct. 4
	Adv. Oct. 4.	
Nov. 2.	Valparaiso, Ind.	Oct. 4
Nov. 5.	Burlington, N. C.	Oct. 4

MISCELLANEOUS

Oct. 8.	Elevated Railway—Brooklyn, N. Y.	Sept. 20
Oct. 17.	Dike—Bernalilo, N. M.	Oct. 4
Oct. 17.	Pier—Manhattan Beach, Cal.	Oct. 4
	Adv. Oct. 4.	
Oct. 23.	Pier—New York, N. Y.	Sept. 27
	Adv. Sept. 27 and Oct. 4.	
Nov. 15.	Flood Control—Dayton, O.	Sept. 13
	Adv. Sept. 13 to 27.	

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., Tonawanda—(Official)—City received no bids furnishing and laying intake pipe in Niagara River. New bids. Noted Sept. 6.

Pa., Newport—Lebanon Valley Water Supply Co. having plans prepared 5,000,000-gal. reservoir in Sand Hill, North Lebanon Twp. About $250,000.

W. Va., Fairmont—City plans 6,000,000-gal. reservoir, 4-stage centrifugal pump and filtration plant. About $40,000. S. B Miller, city engr.

N. C., Wilson—Town plans to issue $50,000 bonds to extend water-works system. W. M. Trotter, city engr.

Tenn., Knoxville—City sold $800,000 bonds to build water, sewer, school, and street improvements in 4 former suburban municipalities. Noted Sept. 13.

Ky., Lawrenceburg—City election in November to vote on $15,000 bond issue to build filtration plant.

Ky., Murray—City issued 20,000 bonds for water-works and electric light systems.

O., Sebring—City election in November to vote on $125,000 bond issue to purchase water-work system and build filtration plant.

Mich., Jackson—City election in November to vote on $50,000 bond issue for pumping station. A. W. D. Hall, city engr.

Wis., Niagara — City to issue $35, bonds for water-works and sewerage systems. Noted Aug. 16.

Ia., Traer—City plans to improve water-works system, installing large mains and tank. About $25,000. F. F. Stoake, supt.

Tex., El Paso—City plans to install 000,000-gal. pumping station. About $7 000. G. Espy, city engr.

Tex., Lockney — City plans waterworks system. H. E. Elrod, Interurban Bldg., Dallas, engr.

Tex., Seymour—City sold $12,000 bonds to build water-works system.

Okla., Hunter—Town plans to issue $25,000 bonds for water-works system.

Okla., Miami—City election Oct. 16 to vote on $45,000 bond issue, water main extensions. A. L. Sailors, supt.

Okla., Wapanucka—City election soon to vote on $20,000 bond issue for water-works and electric light systems. Dr. B. L. Neville, mayor. Noted Apr. 26.

Colo., Ft. Morgan—City election Nov. 6th to vote on $25,000 bond issue to improve water-works system. G. O. Cox, supt.

Idaho, Driggs — City to issue $10,000 bonds to improve water-works system.

Utah, Brigham—City having plans prepared by H. S. Kleinschmidt, engr., Salt Lake City, for water-works improvements. Noted Sept. 20.

Nev., Reno—J. B. Holly, Humboldt Bank Bldg., San Francisco, plans to bring water supply from Dog Creek, Sierra Co., Cal., Plans include storage dam, 10 ft. high and pipe line 14 mi. long. About $250,000.

Ariz., Williams—Town election soon to vote on $75,000 bond issue for water-works and electric light systems. L. Stover, supt.

Wash., Waitsburg — City having plans prepared by G. L. Sawyer, engr., White Bldg., Seattle, water-works system. About $50,000. Noted Sept. 6.

Ore., Rainier—City plans filtration plant. 20,000,000 gal. capacity. About $20,000. L. C. Kelsey, Selling Bldg., Portland, engr.

Cal., Martinez—City plans to install water-works system and sewers. About $200,000.

Cal., Seal Beach—See "Sewers."

Cal., Sonoma—(Official)—City election soon to vote on $45,000 bond issue for water-works system. T. Lewis, city engr.

Cal., Tropico—City election Oct. 10th to vote on $50,000 bond issue, water-works system. A. Campbell, supt.

B. C., Prince Rupert—City plans to extend water mains. About $10,000. E. A Woods, city clk.

BIDS DESIRED

O., Akron—(Official)—Until Oct. 19, by C. F. Beck, dir. pub. ser. contr. No. 89. 17.460-ft. 4-16in. c.-i. water pipe; advertised in this issue.

Ill., Grosse Point—(Official)—Until Oct 17, by Village, for c.i. water pipe, etc Windes & Marsh, Winnetka, engrs; advertised in this issue.

Kan., Caldwell—(Official)—Until Oct. 16, by H. W. Baker, city clk., for water-works and electric-light improvements, including brick power station and concrete reservoir. 500-g.p.m. motor-driven centrifugal pumps and laying ½-mi. c.-i. pipe. Burns & McDonnell, 402 Inter-State Bldg., Kansas City, Mo., engrs.

Neb., Pender—Until Oct. 12, by City, installing water-works and electric-light plants. Henningson Eng. Co., Omaha, engrs. Noted Sept. 13.

Water-Works (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—(Official)—Report of contract awarded for Shandaken tunnel to Degnon Contg. Co., 68 Hunters Point Ave., Long Island City, published in last week's issue was incorrect. Bids are still under advisement. Noted Sept. 20.

★**N. J., Bayonne**—(Official)—City let contract laying water mains and appurtenances to C. P. Kavanaugh, Inc., $27,924. Noted Sept. 13.

★**N. C., Belmont**—City let contract water-works system to J. R. McCrary Co., Atlanta, Ga. $20,000 bonds lately issued.

O., Akron—(Official)—City received low bids building elevated steel water tank Chicago Bridge & Iron Wks., 37 West Van Buren St., Chicago, 8-post tower, $30,500, 6-post tower, $29,200; Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, segmental bottom, $30,950, hemispherical bottom, $31,150; A. Tufts, Candler Annex, Atlanta, Ga., rein.-con. $30,000. Noted Sept. 13.

★**Ia., North McGregor**—City let contract water-works system to Vogelberg & Udelhofen, Potosi, Wis., $10,367. Noted Sept. 13.

★**Minn., Townsend**—City let contract water-works system to Monarch Constr. Co., Bozeman, Mont.

★**Mo., St. Louis**—City let contract furnishing material, excavating, examining, and inspecting 285,000 lin.ft., 6 20-in. c.i. water mains to National Water Main Cleaning Co., 50 Church St., New York City, 17c. and 19c. per lin.ft.

★**Tex., Throckmorton**—City let contract earth dam, 1,500,000 gal. to Stamford Constr. Co., Stamford. Noted Aug. 23.

★**Wash., Seattle**—Bd. Pub. Wks. let contract laying water mains in Michigan St. and others to S. A. Moceri, $11,924.

SEWERS

Proposed Work

N. Y., Buffalo—City plans sewers in portions Phyllis, Bailey, Davidson, Millicent, Hastings Aves., and Suffolk St. G. H. Norton, city engr.

N. J., Woodbury—City having plans prepared sewerage system and sewage disposal plant.

Pa., Hazleton—City had plans prepared sewage-disposal plant. About $50,000. B. E. Youngman, city engr.

Pa., South Bethlehem—Council passed ordinance authorizing $55,000 bond issue for building sewers and improving streets. R. M. Brady, boro. engr.

Va., Richmond—City plans sewer in Lee Dist. About $40,000. C. E. Bolling, city engr.

S. C., Columbia—(Official)—City rejected bids, sanitary sewer outfall, Columbia Canal and Smith's Branch. Noted Sept. 13.

Ga., Columbus—(Official)—City defeated at election $177,000 bonds to improve sewers. Noted May 24.

Tenn., Knoxville—See "Water-Works."

O., Akron—See "Streets and Foads."

O., Bellevue—City soon lets contract sewerage system portions Main St. L. C. Herrick, city engr.

O., Cincinnati—City election Nov. 6, to vote on $500,000 bond issue to build sewers. F. Krug, city engr.

O., Cincinnati—City plans sewer in portions Minion Ave. R. Hoffman, city engr.

O., Cleveland—City election Nov. 6 to vote on $300,000 bond issue for sewers. R. Hoffman, city engr.

O., Cleveland Heights—(Warrensville P. O.)—Village plans sewer and water connections in 14 streets. About $40,000. H. H. Canfield, Clk.

O., Dayton—City plans sanitary sewers in Mt. Auburn Dist. E. O. Eichelberger, city engr.

O., Hamilton—City plans sewers in portions Hanover and 11th Sts. and Shuler Ave. F. F. Weaver, city engr.

O., Lima—City election in Nov. to vote on $155,000 bond issue to build relief sewers. C. Bryson, city engr. Noted Sept. 13.

O., Piqua—City plans sewers in portions Vine St. and several alleys. A. Schroeder, city engr.

O., Salem—City having plans prepared for sewer in portions Park St. B. M. Finch, city engr.

O., Tiffin—City plans sewers in portions Hedges St. and Grand Ave. J. I. Obenlander, city engr.

Ind., Laporte — City having plans prepared southside trunk sewerage system. About $237,781. L. D. Goddard, city engr.

Ind., Logansport—City had plans prepared, southeast dist. sewer. About $15,430. H. H. Thompson, city engr.

Mich., Grand Rapids—City having plans prepared by Hoad & Decker, engrs., Ann Arbor, sewage-disposal plant.

Mich., St. Clair Heights—(Detroit P. O.)—City voted $10,000 bonds, sewerage system. Noted Sept. 27.

Ill., Knoxville—City plans disposal plant, including concrete sedimentation tank, sand filter beds, dosing apparatus, under drains and sludge beds. About $29,500. Noted May 10.

Ill., Rockford—Council passed ordinance to build sewers in portions Stanley and North Madison Sts. and Hoffman Blvd., sidewalks on 4th and 5th Aves., Cedar, West, and South Winnebago Sts. E. Main, city engr.

Ill., Rock Island—City having plans prepared sewerage system in Hill Dist. W. Treichler, city engr.

Wis., Niagara—See "Water-Works."

Minn., St. Paul—City plans sanitary sewerage system in West St. Anthony Park. About $56,764. O. Clausen, city engr.

Tex., Navasta—City plans to install sewerage system.

Tex., Texarkana — City voted $50,000 bonds for septic tank for sewerage system. About $100,000; Arkansas side of city will pay half. O. Yenglin, city engr.

Okla., Miami—City election Oct. 16 to vote on $20,000 issue for sanitary sewers, and $80,000 for storm sewers. Noted June 28.

Colo., Greeley—Council passed ordinance for creation new sewer districts.

Ariz., Glendale—City had plans prepared by A. Holmquist, engr., sewerage system. About $30,000. Noted June 21.

Wash., Grandview—City plans to install sewerage system.

Cal., Martinez—See "Water-Works."

Cal., Seal Beach—City election soon to vote on $45,000 bond issue to build sewerage and water-works systems.

Ont., St. Catherines—City had plans prepared sewerage system portion Western Hill. W. P. Near, city engr.

BIDS DESIRED

N. J., North Bergen—(Weehawken P. O.)—Until Oct. 12, by Town Com., sewer in Tounelle Ave. About $20,000.

O., Cleveland—Until Oct. 11, by City, installing sewer, portion East 12th St. R. Hoffman, city engr.

Mich., St. Joseph—(Official)—Until Oct. 25, by C. J. McMullen, city clk., for sewage disposal plant, advertised in this issue. Noted Sept. 20.

Mont., Billings—See "Streets and Roads."

Cal., Santa Barbara—See "Streets and Roads."

Cal., Santa Barbara—Until Oct. 18, by A. C. Hall, city clk. outfall sewerage system. About $85,000. Olmsted & Gillelen, 1112 Hollingsworth Bldg., Los Angeles, engrs. Noted Aug. 9.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Conn., Bridgeport**—City let contract West sanitary trunk sewer, including 3700 ft. 15-in., 700 ft. 12-in. and 1100 ft. 8-in. tile pipe, to L. Petrossi, 39 Woodbridge St., Hartford.

★**Conn., Stamford**—Town let contract, sewage-disposal plant to Frank Palmer, Stamford. Noted Sept. 13.

★**N. C., Belmont**—City let contract, sanitary sewerage system to J. B. McCrary Co., Atlanta, Ga., $20,000. Noted Aug. 23.

★**La., Lafayette**—City let contract sanitary sewers and sewage disposal plant to F. C. Youmans Co., Houston, $80,817. Noted Aug. 30.

Ind., Hammond—City received low bids for pump, Calumet Ave. sewer, from United Constr. Co., $22,100; Nejdl & Greenwald, Robertsdale, $26,000.

★**Ill., Summit**—(Official)—City let contract improving sewerage system to F. J. Lambert, Summit, $15,802. Noted Sept. 20.

★**Wis., Milwaukee**—City let contract sewer in portion Lake St., to Wisconsin Constr. Co., 1000 Humboldt Ave., $100,113. Noted June 28.

★**Mo., Kansas City**—City let contract, sewer in Dist. No. 356 to Halpin-Dwyer Constr. Co., Kansas City, $119,000. Noted Sept. 13.

★**Ore., Astoria**—City let contract Scow Bay sewer to Coluccio & Moceri, 1642 Lane St., Seattle, $43,900. Noted Sept. 27.

★**Cal., San Diego**—City let contract sanitary sewerage system, Ocean Beach Dist., to J. Kennedy, Washington Bldg., Los Angeles, $92,394. Noted Sept. 27.

★**Cal., Santa Barbara**—City let contract 12-in. vitr. pipe sewers in Salispuedes St., and 14 inlets to J. T. Cornwall, Santa Barbara, $18,128.

★**Que., Verdun**—City let contract building sewers and sidewalks to M. J. Stack Paving & Contg. Co., Ltd., 167 McCord St., $50,000.

★**Ont., Toronto**—Bd. Control let contract Rosedale Creek sewer from high level pumping station to Russell Hill Rd. to Godson Contg. Co., Ltd., Manning Chambers, $150,000. Noted Aug. 30.

★**Ont., Toronto**—(Official)—City let contract sewer on Yonge St. as follows: Sect. 1, McDonald & Nicholson, $24,100; Sects. 2 and 3, Commissioner of Wks., $66,900 and $12,815, respectively. Noted Sept. 20.

BRIDGES

Proposed Work

N. Y., Bronx—Dept. Bridges, Municipal Bldg., having plans prepared by Stoughton & Stoughton, archts., 96 5th Ave., for steel and iron bridge over Bronx Pkway. About $250,000.

Del., Wilmington—New Castle Co. plans to build new rein.-con. bridge on Washington St. About $150,000.

Va., Newport News — Washington-Newport News Short Line plans to build several bridges, including double leaf bascule span over James and Nansemond Rivers, to connect Newport News to Pig Point; also over southern branch Elizabeth River, near Navy Yard. F. S. Gannon, 55 Liberty St., New York City, pres.

Va., Richmond — City preparing plans 2000-ft. steel and iron bridge, 28-ft. over all, over James River, 9th St. C. B. Bolling, city engr.

Fla., Jacksonville—See "Streets and Roads."

Ind., Anderson—(Official)—Madison Co. receiving bids about February for 492-ft. concrete bridge with 30-ft. roadway over White River on 9th St. About $80,000. Noted Sept. 20.

Mich., Detroit—City election Nov. 6 to vote on $3,000,000 bonds to build Belle Island rein.-conc. bridge, length bridge proper, 2200 ft., bridge and approaches 3500 ft., width of roadway, 59 ft., sidewalks, 12 ft., total width, 86 ft., 30 ft. maximum span, number spans, 19. Noted June 14.

Ill., Lewiston—See "Streets and Roads."

Okla., Sapulpa—See "Streets and Roads."

Wash., Pullman—City plans election to vote on $11,350 bonds to build rein.-con. bridge over Missouri Flat Creek, North Pullman.

Cal., Porterville — City voted $30,000 bonds to build bridge over Porter slough. Noted Aug. 23.

Que., Cartierville—City having plans prepared by W. C. Thomson, engr., for new rein.-con. bridge. About $200,000.

Bridges (Continued)

BIDS DESIRED

N. J., Somerville—Until Oct. 12, by Bd. Freeholders, Somerset Co., repairing Voorhees Everett, Rocky Hill and School House bridges. J. Doughty, Jr., co. engr.

N. J., Woodbridge—Until Oct. 8, by Bd. Freeholders Middlesex Co., New Brunswick, building rein.-con. bridge over Sucker Brook. A. B. Fox, co. engr.

Pa., Butler—(Official)—Until Oct. 17, by Pennsylvania Pub. Ser. Comn., Harrisburg, building steel bridge on Main St.; advertised in this issue.

Kan., Columbus — See "Streets and Roads."

Wash., Okanogan—Until Oct. 9, by J. D. Hubbard, Clk., Okanogan Co., building 390-ft. Howe Truss span bridge, timber and pile trestle approaches, over Okanogan River near Ellisford Sliding. H. E. Smith, co. engr.

California—(Official)—Until Oct. 15 by State Highway Comn., Sacramento, building 120-ft. rein.-con. bridge over Castle Creek, 45-ft. bridge over Mears Creek, 30-ft. bridge over Flume Creek. A. B. Fletcher, highway engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Cayuga—New York Central R.R., New York City, let contract rein.-con. bridge at Barge Canal crossing to Walsh Constr. Co., 14½ West 3rd St., Davenport, Ia., $290,000.

N. J., Jersey City—Bd. Freeholders Hudson Co., received low bid improving 14th St. viaduct from Nolan & Hornung Constr. Co., West Hoboken, $62,471. Noted Sept. 13.

★Ky., Owensboro—Daviess Co. let contract building 16 bridges to Vincennes Bridge Co., Vincennes, Ind., and Champion Bridge Co., Wilmington, O., $80,000.

★Mich., Mason — See "Streets and Roads."

★Ill., St. Joseph—(Official)—Champaign Co., Urbana, let contract 110-ft. steel bridge, as follows: superstructure to Joliet Bridge & Constr. Co., Joliet, $9598; substructure to Bresse Road Supply Co., $2789. Noted Sept. 13.

★Wis., Wausau—City let contract building 200-ft. rein.-con. bridge over Wisconsin River to Wausau Iron Wks., Wausau, $75,-000. Noted Sept. 13.

★Okla., Norman—Cleveland Co. let contract building 3 rein.-con. and 2 steel bridges to Oklahoma Bridge Co., 222 Baltimore Bldg., Oklahoma, $11,741.

★Wash., Bellingham — Council let contract rein.-con. arch bridge over Whatcom Creek at Dupont and Prospect Sts., to C. G. Huber, Central Bldg., Seattle, $11,-569. Noted July 12.

Cal., San Diego—Bd. Superv., San Diego Co., received low bid building rein.-con. bridge over Los Flores Creek on State Highway from F. Steffgen, Owl Drug Bldg., $13,-997.

STRUCTURAL STEEL WORK

BIDS DESIRED

Pa., Butler—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Okla., Norman—See "Bridges."

REINFORCED CONCRETE

Proposed Work

N. Y., Rochester—See "Industrial Works."

N. J., Newark—See "Industrial Works."

Pa., Pittsburgh—See "Industrial Works."

Del., Wilmington—See "Bridges."

Del., Wilmington—See "Miscellaneous."

Fla., Jacksonville—See "Streets and Roads."

Ind., Anderson—See "Bridges."

Mich., Detroit—See "Bridges."

Wis., West Allis—See "Industrial Works."

Wash., Pullman—See "Bridges."

Cal., Azusa—See "Miscellaneous."

Cal., Los Angeles—See "Industrial Works."

N. S., Annapolis Royal—See "Miscellaneous."

Que., Cartierville—See "Bridges."

BIDS DESIRED

N. J., Woodbridge—See "Bridges."

Kan., Caldwell—See "Water-Works."

California—See "Bridges."

Cal., Manhattan Beach—See "Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Cayuga—See "Bridges."

★Wash., D. C.—See "Federal Government Work."

★Ga., Atlanta—See "Industrial Works."

★Wis., Wausau—See "Bridges."

Minn., Minneapolis—See "Buildings."

★Okla., Norman—See "Bridges."

★Okla., Tulsa—See "Buildings."

★Wash., Bellingham—See "Bridges."

Cal., San Diego—See "Bridges."

Road Builders

There is an important message from the Commanding Officer of the 23rd Engineers—the new highway construction regiment—to you. On pages 625 and 626 of this issue.

Read It

STREETS AND ROADS

Proposed Work

Mass., South Boston—(Boston P. O.)—City approved order to lay out and construct portion Alger St. About $36,000.

N. Y., Albany—E. Duffey, state highway comr., 55 Lancaster St., received no bids, building and improving highways in various counties. Noted Sept. 6.

N. Y., Buffalo—City plans paving portion Walnut St., asphalt on concrete foundation. G. H. Norton, city engr.

N. Y., Johnson City—Village plans paving portions Willow St., Corliss, Grand and Carhart Aves., concrete.

New Jersey—(Official)—State Highway Comn., Trenton, rejected paving 4000 sq.yd. surface pavement, concrete. New bids. Noted Sept. 13.

N. J., Burlington—Burlington and Florence twps. plan to improve 4 mi. River Rd. Address E. E. Mount.

N. J., Jersey City—City plans improving portions De Kalb Ave., Van Cleef St. and Germania Ave., bituminous, concrete base; Dwight St., asphalt, concrete base. C. A. Van Kuren, city engr.

N. J., West New York—(Weehawken P. O.)—Town plans paving and improving portion Van Buren Pl. About $10,000.

Pennsylvania — State Highway Comn., Harrisburg, plans highway between Phila. and Morrisville; also 10-mi. cement road in Lawrence Co. F. B. Black, state highway comr.

Va., Abingdon — Washington Co. having plans prepared for road connecting Big Creek and Fish Dam Sections.

Va., Richmond—Henrico Co. plans to appropriate $10,000 to improve Petersburg turnpike.

N. C., Charlotte—City election Oct. 10 to vote on $275,000 bond issue to improve roads.

N. C., Northwilkesboro—Town Council authorized $60,000 bond issue to improve streets.

N. C., Raleigh—City sold $50,000 bonds to improve streets. E. R. Pace, city engr.

S. C., Gaffney—Cherokee Co. Highway Comn. will receive bids in February or March for road work through county including portions of National Highway. About $225,000 available from proceeds of bond issue and $17,000 from Federal Aid. Noted Apr. 19.

Fla., Jacksonville—City and Duval Co. plan to issue bonds for improving and widening county road from city limits to state camp; also building concrete bridges at 104th St. and over McGirts and Trout Creeks. G. D. Ackerly, city clk. F. L. Meggs, chn. co. bd.

Fla., Kissimmee—Osceola Co., St. Cloud Dist. plans organizing road and bridge district and issuing $275,000 bonds to build concrete highway from here to [illegible] and from Ashton to east co. line.

Fla., Pensacola—Escambia Co. Bd. of Comrs. will create road district comprising 12 precincts of the city and plans election to vote on bond issue to pave navy yard and between Bayou Chico and Bayou Grande. About $90,000.

Fla., Quincy—City election Oct. 9 to vote on $18,000 bond issue to pave streets.

Ala., Bay Minette — Baldwin Co. voted $75,000 bonds to build roads. Noted Sept. 13.

Ala., Montgomery—County Bd. of Revenue plans to improve roads between here and Camp Sheridan. About $20,000 will be expended. R. H. Jones, pres.

Tenn., Knoxville—See "Water-Works."

Tenn., Ridgely—City plans walks on both sides of principal streets; $10,000 bonds voted for work.

Ky., Central City—City plans to improve, with state aid, Broad and other streets, macadam and rock asphalt.

O., Akron—City plans paving, grading, curbing, building walks and sewers on portions West North and Grand Sts., South Martha, East and Rhodes Aves. E. A. Zeisloft, city engr.

O., Ashland—Ashland Co. sold $168,000 bonds to improve Market Rd. No. 3 and 10, inter-county highway Nos. 140 and 142. H. C. Westover, co. aud. Noted Sept. 13.

O., Bay Village—(Official)—Village to sell $18,000 bonds Oct. 15 to improve streets. A. L. Miller, clk.

O., Cleveland—Council passed ordinance to issue $30,000 bonds to improve portions 9th St. R. Hoffman, city engr.

O., Columbus—City Council passed ordinance to improve and pave portion 11th Ave. H. Maetzel, city engr.

O., Columbus—City plans to issue $200,-000 additional bonds for street improvements. H. Maetzel, city engr. Noted Sept. 6.

O., Lakewood—City election in Nov. to vote on $500,000 bond issue to repave Clifton Blvd., Detroit Ave. and West Madison Ave. E. A. Fisher, city engr.

O., London—City election Nov., to vote on $30,000 bond issue to pave various streets. M. McCafferty, city engr. Noted July 19.

O., Troy—Miami Co. to sell $23,500 bonds Oct. 29 to build, improve and repair portion Miami St. C. N. Peters, aud.

Ind., Columbus—(Official)—Bartholomew Co. rejected bids building 22,368 ft. gravel roads, Flatrock and German Twps. W. H. Scott, aud. Noted Sept. 13.

Mich., L'Anse—Baraga Co. soon lets contract, 40 and 50-mi. highways. About $400,000. M. Boetsch, clk.

Mich., St. Clair Heights—(Detroit P. O.)—City voted $30,000 bonds to pave streets.

Ill., Lewiston—Fulton Co. plans to spend $150,000 to build roads and bridges.

Ill., Rockford—Winnebago Co. election soon to vote on $145,000 bond issue to improve road from here to Boone Co. line.

Ill., Savana—Mason Co. plans to build hard-surface road, 15 ft. wide. About $16,-000. State to appropriate half of sum.

Ill., Sullivan—Village plans paving State, B'way. and County Sts., vitr. brick, 3-in. concrete foundation. About $76,000.

Ill., Waukegan—City plans paving portion Market St., brick, to a width of 25 feet. About $38,093. M. J. Douthitt, city engr.

Wis., Green Bay—Brown Co. sold $175,-000 bonds to build roads. R. B. Vickery, co. clk. Noted Sept. 20.

Ia., Des Moines—City plans paving portions Carpenter Ave. A. Hands, city engr.

Ia., Seymour — (Official) — City received no bids building sidewalks, street and alley crossings. J. W. Lowry, city clk. Noted Sept. 13.

Minn., Stillwater—Washington Co. plans to build State Rd. No. 3 with state aid; about $15,000.

Kan., Ft. Scott—Bourbon Co. plans to build Richard Rd., from Hornaday Bridge to Glenn Campbell farm, 6 mi.

Kan., Kansas City—Wyandotte Co. plans to repave Parallel Rd., 2½ mi.; Kaw Valley Rd., 5½ mi. O. K. Williamson, co. engr.

Streets and Roads (Continued)

Neb., Holdrege—City soon lets contract paving portions East and West Aves. About $10,000.

Mont., Great Falls—City plans paving, grading, draining, etc., 6th St. About $26,000. L. B. Evenson, city engr.

Mo., Benton—Scott Co. sold $50,000 bonds to build roads. Noted Aug. 23.

Mo., New London—Ralls Co. election defeated $250,000 bond issue for building 150-mi. hard surface roads. Noted Aug. 30.

Mo., Springfield—Green Co. voted $10,000 bonds to improve 15-mi. road in Galloway Special Rd. Dist. L. Luster, atty. Noted Sept. 6.

Arkansas—State Highway Dept., Little Rock, had plans prepared for Jefferson Highway from Harrison to Newton Co. line.

Ark., Prescott—Nevada Co. Comrs. had plans prepared by State Highway Comn., Little Rock, for road from Prescott to Little Missouri River, 8 mi., gravel. About $47,000.

Texas—State Highway Dept., Austin, plans short-line highway between Antonio and Houston.

Tex., Beaumont—Jefferson Co. plans to build Beaumont-Houston Rd., running from here to Liberty Co. line, via China and Nome; to be part of Jefferson Highway from New Orleans, La., to Winnipeg, Can. Also road from Voth through Beaumont to Port Arthur and Sabine. This road will connect with others leading into Kansas City, Mo. State Highway Comn. will pay part of cost of work.

Tex, Burnet—Burnet Co. election Oct. 20 to vote on $100,000 bonds to build roads, Precinct No. 4.

Tex., Clairmont—Kent Co., Precinct No. 1, voted $100,000 bonds to build roads.

Tex., Galveston—City plans to fill crest on boulevard between 25th and 39th Sts., mudshell on sand bedding. About $57,500. A. Willits, city engr.

Tex., Omaha—City voted $35,000 bonds for street improvements. Address the Mayor.

Tex., Palestine—Anderson Co. secured R. Q. Mills highway and plans to build. The road will extend from Corsicana to Comanche. Noted Sept. 27.

Tex., Seminole—Gaines Co. election soon to vote on $250,000 bonds to build good roads.

Tex., Victoria—City plans paving streets; $100,000 bonds recently voted for work.

Okla., Hugo—Choctaw Co. plans election Oct. 13 to vote on $50,000 bond issue for improving roads in Wilson Twp. Noted June 7.

Okla., Sallisaw—Sequoyah Co. election Oct. 22 to vote on $18,000 bond issue for roads and bridges in Paw Paw Twp. and $20,000 bond issue for some work in Campbell Twp.

Okla., Sapulpa—Creek Co. election soon to vote on $800,000 bond issue to build roads and bridges.

Idaho, Cœur d'Alene—Kootenai Co., Fourth of July Canyon, created highway improvement district and plans to vote on $25,000 bond issue, which, together with $50,000 from Federal Government, $50,000 from state and $50,000 from Shoshone Co., makes total of $150,000 for work in district.

Utah, Salt Lake City—Lincoln Highway Assn. plans road over Great Salt Lake Desert to connect road leading into Nevada near Deep Creek Mountains. About $15,700.

Wash., Cheney—City election Oct. 8th to vote on bond issue to improve 36 blocks.

Wash., Colfax—Whitman Co. Comrs. plan Ewan-St. John highway, 23 mi. hard surface. About $200,000.

Wash., Everett — (Official) — Snohomish Co. rejected bids building permanent highways Nos. 32 and 33. M. Weatherbee, co. aud. Noted Sept. 13.

Wash., Pullman—City plans election soon to vote on $11,350 bond issue for paving streets and bridges.

Wash., Ritzville—Adams Co. Comrs. plan to build permanent highway from here to Grant co. line.

Wash., Seattle—City had plans prepared paving Elliott Ave., 524,000 yd. earthwork, 42,000 sq.yd. 5-in. concrete base, asphalt, 14,000 sq.yd. 6-in. concrete base, 1900 sq.yd. asphalt top, 38,000 sq.yd. concrete paving, 6-in. base, 66,000 sq.yd. 6-in. concrete base, brick block, 24,000 sq.yd. 7-in. concrete base, etc. About $700,000. A. H. Dimock, city engr.

Ore., Klamath Falls—City plans to pave Conger Ave., ½ mi., including 5-ft. concrete walks along one side. About $25,765.

Cal., Colusa—Colusa Co. had plans prepared highway between Princeton, Colusa and Grimes, 27 mi., 10 ft. wide, concrete. About $200,000.

Cal., Los Angeles—City rejected bids improving 1st St. New bids. A. C. Hansen, cty engr. Noted Sept. 13.

Cal., Richmond—City plans improving portions 19th St. A. C. Faris, clk.

Cal., Tulare—City rejected bids paving 2.3 mi., concrete. Noted Aug. 30.

BIDS DESIRED

N. Y., Brooklyn—(Official)—Until Oct. 10, by L. H. Pounds, boro. pres., regulating and paving, asphalt, 6-in. concrete base, portion roadway Hopkinson, Thatford and 20th Aves., Montgomery, Van Brunt, 68th and 78th Sts., regulating and repaving, grade 1 granite, 6-in. concrete base, portion Van Brunt St., regulating, curbing where necessary, and paving, asphalt, 6-in. concrete base portion 80th St.

N. Y., S. I., St. George—Until Oct. 8, by C. D. Van Name, boro. pres., repaving Old Manor Rd.

N. J., Highland Park—Until Oct. 8, by boro. grading 8th Ave., 1st Ave., Magnolia and Montgomery Sts. R. B. Craig, clk. Noted Sept. 20.

Fla., Tallahassee—Until Oct. 15, by Leon Co. Comrs., Woodville Rd., 6 mi. rock; Chaires and Capitola Rd., to Jefferson Co. line, 4 mi., sand clay. B. E. Reed, co. engr.

Fla., Tampa—Until Oct. 16, by W. P. Culvreath, clk. Hillsborough Co. Comrs. to construct 54 mi. hard surface roads through Pasco, Polk, Manatee and Pinellas Cos.

Louisiana—(Official) — Until Oct. 8, by State Highway Dept., New Orleans, following highway work: Baton Rouge-New Orleans Rd., Ascension Parish, 27.48 mi.; Lafayette-New Iberia and Lafayette-Crowley Rds., Lafayette Parish, 12.2 mi. D. Buie, state highway engr.

Tenn., Johnson—Until Oct. 16, by W. O. Dyer, city mgr., paving and installing sewer, Dist. No. 24, 11,440 sq.yd. paving, 8580 lin.ft. curb and gutter, 8630 6- to 8-in. sewers; Dist. No. 32, 7473 sq.yd. paving, 5680 lin.ft. curb and gutter, 5780 6-8-in. sewers and 1200 lin.ft. storm sewers; Dist. No. 33, 3540 sq.yd. paving, 2896 lin.ft. curb and gutter, 2608 6- 8-in. sewers; Dist. No. 34, grading, 3000 sq.yd. paving, 2692 lin.ft. curb and gutter, 2426 6- 8-in. sewers. P. T. McDonald, city engr.

Ohio—Until Oct. 12 by State Highway Dept., Columbus, building roads in various counties as follows:

O., Cleveland—Until Oct. 10, by City improving and paving portions Edgewater Cliff Drive, West Blvd., West 82nd and West 105th St. R. Hoffman, city engr.

Columbus, Ohio—The Ohio Highway Department will open bids October 12 for the following work: Ashland Co., Sect. "A," Columbus-Wooster Rd., monolithic brick, 1.54 mi., cost $44,170; Sect. "A," Ashland-Norwalk Rd., monolithic brick, 4.72 mi., $11,057; Sect. "G," Savannah-Vermillion Rd., monolithic brick, 4.08 mi., $84,646; Clermont Co., Sect. "K-1," Cincinnati-Chillicothe Rd., water-bound macadam, 2.04 mi., $19,403; Sect. "N-1," Milford-Hillsboro Rd., water-bound macadam, 0.98 mi., $11,398; Darke Co., Sect. "A-1," Dayton-Greenville Rd., concrete, 2.63 mi., $66,180; Highland Co., Sect. "K," Hillsboro-Piketown Rd., bituminous macadam, 2.40 mi., $22,729; Huron Co., Sect. "L," Bellevue-Norwalk Rd., monolithic brick, 1.68 mi., $42,618; Knox Co., Sect. "K," Columbus-Wooster Rd., rein.-con., 1.61 mi., $49,093; Lucas Co., Sect. "J," Toledo-Napoleon Rd., concrete-macadam, 4.48 mi., $73,334; Sect. "K," Toledo-Napoleon Rd., concrete-macadam, 3.73 mi., $85,801; Mahoning Co., Sect. "B," Youngstown-Lowellville Rd., brick, 1.50 mi., $53,791; Sect. "Y," Canfield-Poland Rd., water-bound macadam, 1.88 mi., $23,088; Morgan Co., Sect. "H," McConnellsville-Athens Rd., water-bound macadam, 2 15 mi., $46,552; Seneca Co., Sect. "A," Tiffin-Fostoria Rd., brick, 1.55 mi., $44,400; Stark Co., Sect. "B-2," Canton-New Franklin Rd., brick, 1.17 mi., $44,483; Summit Co., Sect. "R," Arkon-Canton Rd., brick, 2.08 mi., $64,501; Sect. "N-1," Cleveland-Massillon Rd., brick, 1.80 mi., $57,854; Wayne Co., Sect. "Q," Wooster-Canal Dover Rd., monolithic brick, 1.17 mi., $23,823; Sect. "A," Wooster-Millersburg Rd., monolithic brick, 0.88 mi., $16,074; Sect. "A," Orrville-Southern Rd., monolithic brick, 2.35 mi., $53,121; Williams Co., Sect. "L," Bryan-Pioneer Rd., water-bound macadam or bituminous macadam, 3.81 mi., $69,763; Jefferson Co., Sect. "N-2," Steubenville-Cambridge Rd., brick, 1.83 mi., $71,719.

O., Germantown—Until Oct. 10, by village, paving West Market St., tarvia bound macadam, and combined curb and gutter. C. A. Eby, clk.

Kan., Columbus—Until Oct. 18, by L. Mobley, chn. Cherokee Co. Comrs., 10-mi. benefit dist. road, involving 33,261 cu.yd. excav., 1 16-ft., 3-span concrete bridge and 25 concrete culverts. C. M. Cooper, co. engr. Noted Aug. 23.

Mont., Billings—Until Oct. 16, by J. M. Bresnahan, city clk., 13,360 sq.yd. paving, together with concrete gutters and sewers in Impvt. Dist. No. 29. E. M. Schneckenberger, city engr.

Mo., Stanberry—(Official)—Until Oct. 8, by C. A. Greenice, city clk., paving, curbing and building gutters, portions Park and Locust Sts. Black & Veatch, Inter-State Bldg., Kansas City, Mo., engrs. Noted Sept. 20.

Ark., Clarendon—Until Oct. 22, by Monroe Co. Rd. Impvt. Dist., Mo., for 22-mi. road through Brinkley forming part Little Rock-Memphis Highway, including 88,000-cu.yd. grading, 34,500-cu.yd. gravel, 7000-cu.yd. concrete, 111,000-sq.yd. bituminous carpet, 1800-cu.yd. rein.-con. in bridges and 1000-lin.ft. pipe culverts. Parkes Eng. Co., Citizens Bank Bldg., Pine Bluff, engrs. Noted May 10.

Ark., Little Rock—(Official)—Until Oct. 10, by City, paving 40,000 sq.yd., asphalt or concrete, Impvt. Dist. No. 261. Lund & Hill, 527 Southern Trust Bldg., engrs.

Idaho, Challis—Until Oct. 8, by E. J. Michaels, clk. Custer Co., widening slope Double Springs Pass Rd.

Idaho, Nez Perce—Until Oct. 8, by Lewis Co. Comrs. building 8500 ft. of 16-ft. highway known as Nezperce-Green Creek highway. J. B. White, clk.

Cal., Santa Barbara—Until Oct. 24, by A. C. Hall, city clk., improving Salsipuedes and Carpenteria Sts., including 6-in. concrete pavements, oil and screenings surfaces, 6-, 8- and 12-in. vitr. pipe sewers, 24-in. concrete pipe drains, etc. A. B. Cook, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts — State Highway Dept., Boston, let contract for road in Ashby to D. J. Damon, Ashby, $24,614.

Massachusetts — State Highway Dept., Boston, received low bids for roads in Egremont and Sheffield, from Perini & Co., Ashland, $52,315; L. C. Fay & Co., 318 Main St., Springfield, $54,310; Hamlin & Nelson, Salem, $56,426. Noted Aug. 30.

Massachusetts — State Highway Dept., Boston, received low bids for following highways: (a) Braintree, (b) Deerfield, (c) Westford, E. C. Sargent, Adams Bldg., Quincy, (a) $17,719; W. F. Loud & Sons, Quincy (a) $18,076; Perini & Co., Ashland, (b) $22,655, (c) $10,483; Middlesex Constr. Co., Medford Hillside, (b) $29,385; J. E. Watkins, Amesbury, (c) $10,672.

★Mass., Malden—(Official)—City let contract 4200 sq.yd. granite block pavement on concrete base to Simpson Bros., 166 Devonshire St., Boston. Noted Aug. 30.

★Mass., Springfield—City let contract paving North End and Abbey St. bridges to Jennison-Wright Co., Detroit, Mich., $19,000.

Connecticut—State Highway Comn., Hartford, received low bids following road work: Branford Twp., (a) 10,765 lin.ft. rein.-con. paving, Short Beach Rd., (b) 11,900 lin.ft. rein.-con. paving Montowese St. and Indian Neck Rd. from C. W. Blakeslee & Sons, 58 Waverly St., New Haven, (a) $40,821 (b) $54,916 (c) $68,009; L. Suzio Constr. Co., State and Broad St., Meriden, (a) $44,691 (b) $60,725 (c) $76,082. Stratford Twp., $7500 lin. ft. concrete or Hassam paving, Barnum Ave., Connecticut Hassam Paving Co., 902 Chapel St., New Haven, $40,518; Maher & Sprague, 185 Church St., New Haven, $43,344. Woodbury Twp., 8180 lin.ft. gravel road, Bethlehem and Watertown Rds., J. DeMichiel, 58 High St., Torrington, $28,908; H. Sanford Osborn,

Streets and Roads (Continued)

Redding Ridge, $30,240; Mascetti & Holley, 561 South Main St., Torrington, $30,716. North Haven Twp., 2066 lin.ft. concrete paving, Quinnipiac Ave., R. D. Daley Co., 6 Church St., New Haven, $8,250; C. W. Blakeslee & Sons, 58 Waverly St., New Haven, $8288; Maher & Sprague 185 Church St., New Haven, $9222. Noted Sept. 27.

N. Y., Brooklyn—(Official)—M. M. Connolly, boro. pres. (Queens Boro.), received low bids regulating and repaving portion Jamaica Ave. from Uvalde Asphalt Paving Co., 1 B'way., New York City, $93,783; Borough Asphalt Co., 1301 Metropolitan Ave., $95,094. Noted Sept. 20.

N. Y., Buffalo—City received low bid repaving Wohler Ave., asphalt, from German Rock Asphalt Co., Inc., Morgan Bldg., $22,980.

★N. Y., Rochester—City let contract asphalt paving to Ribstein-Holler Co., 16 State St., Main St., $15,311; Chilli Ave., $16,344; Rochester Vulcanite Pavement Co., Exchange Pl. Bldg., Penhurst St., $21,155. Noted Aug. 23.

N. Y., Rochester—City received low bids paving Werner Park, asphalt, from Rochester Vulcanite Pavement Co., Exchange Pl. Bldg., $12,168, and Whitmore, Rauber & Vincinus, 279 South St., $12,618. Noted Aug. 23.

★N. J., East Orange—City let contract paving Woodland Ave., asphalt block, to Chapman & Lawrence, 26 Clinton St., Newark, $30,000.

★N. J., East Orange—City let contract resurfacing portion South Clinton St., bituminous concrete, to Uvalde Asphalt Paving Co., 1 Bway., New York City. Noted June 14.

★N. J., Jersey City—Bd. Freeholders, Hudson Co., Jersey City, and Essex Co., Newark, let contract repaving bridge on Lincoln Highway over Passaic River to R. J. Emmer, Weehawken. About $29,900.

★N. J., Kearny—(Arlington P. O.)—Town Council let contract paving Midland Ave., warrenite on concrete foundation, to Maher & McNicholas, Passaic Ave.

N. J., Newark—City received low bids paving (a) North 6th St., 11,100 sq.yd. asphalt, 6-in. concrete foundation; (b) Geneva St., 2900 sq.yd. asphalt, 6-in. concrete foundation; (c) North Canal St., 2700 sq.yd. granite, concrete foundation; from Newark Paving Co., 133 1st St., (a) $33,831, (b) $10,382, (c) $15,235; Northern Constr. Co., Wiss Bldg., (a) $36,244, (b) $10,459; Standard Bitulithic Co., Essex Bldg., (a) $36,066, (b) $16,210; R. Sangiovanni, 80 Hoyt St., (c) $16,210; A. J. Milmoe, 83 Littleton Ave., (c) $16,297. Noted Sept. 20.

★Pennsylvania—(Official) — State Highway Comr. let contract 2 roads, McKeon Co., to Larson & Pascuzzi, Kane, $144,250; L. Schultz & Sons, Fredonia, N. Y., $43,777. Noted Aug. 23.

★Pa., Phila.—Bureau Hignways let contract asphalt paving to Mack Paving & Constr. Co., Nicetown Lane and Whitaker Ave., and Barber Asphalt Co., Land Title Bldg., $14,395, and $27,950 respectively.

Md., Elkton—Cecil Co. received low bid building 1½-mi. concrete road from Millers Corner to Elk Mills from E. R. Sutton, $30,000.

★W. Va., Edgewood—(Wheeling P.O.)—(Official)—City let contract 25,000 sq.yd. paving 2-in. warrenite, 6-in. concrete foundation, to Atlantic Bitulithic Co., Va. Railway and Power Bldg., $50,000. Noted Sept. 20.

★W. Va., Parkersburg—City let contract paving 20th and 22nd Sts., to Kennedy & Son, Parkersburg. About $16,206 and $10,188, respectively. Noted Sept. 27.

★N. C., Charlotte—Mecklenburg Co. let contract building roadway to Camp Green to Noll Constr. Co., 8 East 6th St., Chattanooga, Tenn. Noted Aug. 16.

S. C., Charleston — (Official) — City received low bids paving 8500 sq.yd. concrete from General Road & Drainage Constr. Co., 709 Union Natl. Bank Bldg., Columbia, $1.815 per sq.yd.; Simons Mayrant Co., 18 Broad St., $1.84; McCrady Bros. & Cheves, Inc., 4 Broad St., $1.94. Noted Sept. 20.

★Fla., Kissimmee — Osceola Co. Comrs. let contract road from Kissimmee to Polk Co. line to be connecting link Dixie Highway between Jackson and Tampa, 278 mi., brick, cement grouted, 16 ft. wide from Kissimmee to fair grounds, balance 9 ft. wide, to Alabama Paving Co., American Trust Bldg., Birmingham.

★Fla., Miami—City let contract paving portions Waddell and 14th Sts., and Biscayne Dr., Contr. No. 16, also Le Gro, H and Columbia Aves., Contr. No. 17, to Municipal Constr. Co., Empire Bldg., Atlanta, Ga., $31,857 and $42,228 respectively; curbing and guttering on same contracts to J. F. Morgan & Co., $13,320 and $38,339 respectively; paving, grading and guttering in Miramar to Freedlund Constr. Co., Miami, $43,839. Noted Sept. 13.

★Ala., Eutaw — (Official) — Green Co. Comrs. let contract building road from here to Five Points to F. D. Harvey & Co., Memphis, Tenn. Noted Sept. 6.

★Tenn., Hohenwald — (Official) — Lewis Co. Comn. let contract paving 30 mi. road to Humphrey & Schenderman, Hohenwald. $16,500. Noted Sept. 27.

★Ky., Owensboro—Fiscal Court Daviess Co., let contract to Miller & Woodruff, paving Ware St., $15,562, Graves Lane, $20,108, Pleasant Valley, $12,348; all of river gravel. M. G. Moore, Hopkinsville, Livermore, Henderson, Boonville, Curdsville, Hardinsburg, Ware, Graves Lane, Pleasant Valley and Hardinburg Rds., concrete, $24,708. Noted Aug. 23.

★O., Cleveland—Bd. Control let contract improving and paving portion East 141st St., to Gould & Maybach, 823 East 150th St., intersections of Fairmount, Fairchild, Wilbus and East 107th Sts., to Baldwin Bros. Co., Rose Bldg., about $13,000. Noted Aug. 30.

★O., Hudson—City let contract paving College, Bolden and Prospect Sts., bitulithic or concrete foundation, to Warren Bros., 142 Berkeley St., Boston, Mass., $27,000.

★Ind., Anderson—(Official)—Madison Co. let contract building 2 rocmac roads, Monroe Twp., to J. R. Reason & Co., Pendleton, $29,275; Sullivan & Sullivan, Alexandria, $38,250. Noted Sept. 13.

Ind., Indianapolis—Bd. Pub. Wks. received low bids paving 46th St., (a) asphalt (b) bituminous concrete, from Republic Constr. Co., 1614 Merchants Bank Bldg., (a) $4.85 (b) $4.65; American Constr. Co., 108 North Delaware St., (a) $5.05, (b) $4.80.

★Michigan — (Official) — State Highway Comn., Lansing, let contract gravel road from Homer to Mt. Haley Twp. to Peterson, Guilding & Allsuede, Sanford, $23,950.

★Mich., Judith Gap—City let contract cement sidewalks, 34 blocks, to J. A. Gudgel & Co., Kalispell, Mont., $20,000.

★Mich., Mason—Ingham Co. let contract grading road 9½ mi. and constructing culvert to C. V. Walker, Fremont, $63,460.

★Ill., Danville—Vermilion Co. let contract paving in Carroll Twp. and village of Indianola, bituminous asphalt, to M. H. Lewis, Hoopeston, $50,000.

★Wis., Racine—(Official)—City let contract paving to Western Impvt. Co., 840 Racine St., $2.25 per sq.yd. sheet asphalt. Noted Sept. 13.

★Minn., Minneapolis — (Official) — City will widen portion 9th and 8th Sts. by day labor. About $236,539, and $200,000 respectively. Noted Sept. 20.

★Minn., Minneapolis—City will grade, surface and build walks and curbs on portions Park Rd. by day labor. About $125,000. F. W. Cappelin, city engr.

Kan., Columbus—Cherokee Co. received low bids for Blake Rd. from E. F. Wilcox, Kansas City, $55,416; D. E. Dorsey, Weir City, $58,761.

★Neb., Omaha—Douglas Co. Comrs. let contract resurfacing West Dodge Rd. to Bauer & Johnson, 44½c. per sq.yd.

★Arkansas—State Highway Comn., Little Rock, let contract road to Camp Pike, warrenite, to M. D. L. Cook, 315 Southern Trust Bldg. About $125,398.

★Tex., Floydada—City let contract building 4 blocks pavement, concrete base, asphalt filler, to Jordan Paving Co., Plainview, Tex. About $40,000.

★Tex., New Braunfels—City let contract paving streets to Uvalde Rock Asphalt Co., San Antonio, $25,000.

★Tex., Victoria—City let contract paving 60,581 yd. rock asphalt, to Uvalde Rock Asphalt Co., 411 Sewearingen-McCraw Bldg., San Antonio, $25,000. Noted Aug. 21.

Okla., Ada—City received low bids paving portions East Main St., blocks, from Western Paving Co., Oklahoma City, $1.98 per sq.yd., Bert Hahn Constr. Co., Ada. $2.07. E. P. McCormick, Tulsa, $2.11.

★Colo., Denver—(Official)—Boulder and Adams Co. Comrs. let contract paving 5-mi Federal Blvd., north of city limits, tarvia Finley method application, to Kelly & Sheeley, $40,000. Noted Sept. 6.

★Ariz., Phoenix—City let contract paving, grading, curbing, guttering and installing sewers on East Moreland St. to Southwestern Contr. Co., Phoenix.

Wash., Seattle—King Co. Comrs. received low bid grading and graveling road between Renton and Renton Junction from E. J. McQuaide, Seattle, $14,083. Noted Aug. 23.

★Wash., Seattle—City let contract paving Latona and 14th Ave. to R. G. Stevenson, 1327 Ewing St. About $27,601 and $8153 respectively; Valley St., to F. N. Badolato, $9462; grading Court St. and other streets to Espeland Bros., $13,615.

★Wash., Vancouver—Clarke Co. Comrs. let contract paving 7800 ft. of Fourth Plain Rd., involving 16 ft. bitulithic on 4-in. concrete base, to United Constr. Co., Northwest Bank Bldg., Portland, Ore. About $27,027. Noted July 5.

★California—(Official) — State Highway Comn., Sacramento, let contract 7.2 mi. grading in Humboldt Co., between Del Rio and Fortuna, to A. Robinson & R. R. Smith, Fortuna. Noted Sept. 20.

★Cal., San Francisco—City let contract concrete sidewalks on Chestnut St. to F. O'Shea, San Francisco, about 17c. per sq.ft., improving Alvarado St. to J. M. Smith, 407 11th St.; about $1.50 per cu.yd., excava.; $2.90 per ft., 8-in. sewer; $80 each, brick manhole; $0.85 per ft., armored concrete curbs; $0.14 per sq.ft. concrete sidewalks; $0.41 per sq.ft. vitr. brick pavement; $0.25 per sq.ft. asphalt pavement; improving Flood Ave. and Clayton St. to Flinn & Treacy, 1st Natl. Bank Bldg. About $0.80 per ft., concrete curb; $0.26 per ft., asphalt pavement; $0.45 per sq.ft. basalt-block pavement; $1.25 per ft., granite curbs; $0.14 per sq.ft., concrete sidewalks.

★Cal., Ventura—Bd. Superv. let contract surfacing 1,193,000 sq.ft. concrete pavement on Telegraph Rd. to Rooney-Wyckoff Co., Consolidated Realty Bldg., Los Angeles. About $22,667. Noted Sept.20.

★Que., Verdun—See "Sewers."

★Que., Yamachiche—Village let contract macadam paving to A. Carrier, Ste. Tite, $20,000.

★Ont., Windsor—City let contract resurfacing Bruce St. to Merlo, Merlo & Ray, 296 Windermere Rd., Walkerville, $14,467.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Pennsylvania—Pennsylvania R.R. plans to extend its yards at Marietta, including 7 pairs of tracks, about 1 mi. A. G. Shand, Broad St., Sta., Phila., ch. engr.

Georgia—Savannah Electric Co., plans trolley line from Savannah to Port Wentworth. About $100,000. H. C. Foss, Savannah, genl. mgr.

Florida—Jacksonville, Miami & Tampa Interurban Ry. prepared plans for line to connect Jacksonville, Pablo Beach, St. Augustine, Daytona, Miami, Sanford, De Land, Orlando, Kissimmee, Bartow, Lakeland, Tampa and other points. W. S. Alyea, St. Cloud, Fla., gen. mgr.

Kentucky—Lousiville & Nashville R.R. made surveys for 7-mi. extension on Catron's Creek and 1-mi. Slater's Fork, to develop coal mines of Kentemia Corp. W. H. Courtenay, Louisville, ch. engr.

Wisconsin—Minneapolis, St. Paul & Sault Ste. Marie Ry. plans to build line from Rugby Jct., Schleisingerville P. O., to Milwaukee; also build passenger depot and freight house in Milwaukee. About $6,000,000. C. N. Kalk, Minneapolis, ch. engr.

Idaho—Pella-Leffler Short Line Ry., recently incorporated with $300,000 capital stock, plans to build line from Pella to junction on Wabash Ry., about 4½ mi. P. H. Van Gorp, Pella, pres.

Utah—Salt Lake & Utah R.R. plans to build line from Salt Lake City to Eureka, about 50 mi. F. D. Nauman, Salt Lake City, ch. engr.

Washington — See "Industrial Works," Tacoma.

California—See "Miscellaneous," Blythe.

Railways—Steam and Electric (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pennsylvania — (Official) — Carnegie Steel Co. let contract building 5-mi. double track railroad from Bull Run on Monongahela & Southern branch of Pennsylvania R.R. across deep gulches and through hills to coke plant at Clairton to Gillespie Steel Co., Westinghouse Bldg., Pittsburgh. Work involves 1,200,000 cu.yd. excava., 75,000 cu.yd. concrete and 1700 ft. double-track tunnel.

★Montana—Big Hole R.R., Anaconda, let contract building 20-mi. line to connect Divide with mines of Elkhorn Mining Co., to Clifton, Applegate & Toole, 2 North Cedar St., Anaconda.

EXCAVATION AND DREDGING

Proposed Work

Miss., Biloxi—Dredging—City plans to appropriate $25,000 or $30,000 for dredging Back Bay Channel.

Ky., Dixon—Ditch—Webster Co. Drainage Bd. soon receives bids building 4 mi. ditch including dredge work. About $25,000. W. C. Hardwick, vice pres.

Ill., Lewiston — (Official) — Drainage — West Matanzas Drainage & Levee Dist., Fulton Co. received no bids laying 7200 ft. 8-in. tile, Lateral No. 1, 2200 ft. 18-in. tile, Lateral No. 2; 4200 ft. 16-in. tile Ditch No. 4. J. H. Wehner, comr. Noted Sept. 13.

Ark., Jonesboro—(Official)—Drainage—Cache River D. D. receiving bids about Nov. 10, building main ditch, 25 mi. long, 125 ft. wide, 30-mi. laterals, 25- to 45-ft. wide, to drain 110,000 acres, Craighead, Lawrence and Jackson Cos. J. R. Rhyme, Corning, engr. Noted Sept. 20.

Mo., Ash Grove—Excavation—Ash Grove Portland Cement Co. plans to build 20-acre artificial lake. About $60,000.

Mo., Poplar Bluff—Drainage—Inter River D.D. had plans prepared by Morgan Eng. Co., Goodwyn Institution, Memphis, Tenn., for 210-mi. canals and 50-mi. levee to drain 114,000 acres in southeastern Missouri, involving 8,000,000 cu.yd. excav., 2,500,000 cu. yd. levee embankment. About $1,240,000.

Idaho, Idaho Falls—Drainage—City plans to establish drainage district along Sand and Willow Creeks to eliminate flood waters. About $90,000.

Ore., Medford—Irrigation—City voted to establish Medford Irrigation Dist. involving 24,000 acres Rogue River Valley.

Cal., Merced—Irrigation—Merced Co. plans to establish districts to build irrigation and drainage systems. Address E. G. Adams, Livingston.

Cal., Olinda—Irrigation—Happy Valley Irrigation Dist. plans election to vote on $80,000 bonds to extend canal system.

Cal., Richmond—Dredging—City plans to spend $400,000 to improve harbor, $200,000 will be used for dredging, other half for bulkheading, rip rapping and filling. H. D. Chapman, city engr.

Cal., San Diego—Dredging—See "Federal Government Work."

BIDS DESIRED

Ind., Rockport—Ditches—Until Oct. 22, by Spencer Co., building ditches involving 387,000 cu.yd. excav. H. Wells, supt. constr.

Ill., Havana—Ditches—Until Oct. 15, by Bd. Comrs. Garden Special D. D., Mason Co., building ditches, involving 194,342 cu.yd. excavation. J. F. Kreiling, comr.

Ill., Lawrenceville—Ditch—Until Oct. 6, by Lawrence Co. Comrs., rebuilding 6 mi. old ditch, involving 50,000 cu.yd. excava., also 2 mi. new ditch, involving 72,000 cu.yd. excav. G. C. Harvey, Mt. Carmel, engr.

Ia., Boone—Drain—Until Oct. 9, by Bd. Supervs. Boone Co., building Drain No. 168, involving 20,270 ft. 6- to 24-in. tile. J. R. Curry, aud.

Minn., Elbow Lake—Drain—Until Oct. 22, by C. M. Nelson, aud., Grant Co., building Drain No. 29, main open ditch, 3⅔ mi. long, bottom width 6 and 8 ft., average depth 9 to 12 ft., involving 124,225 cu.yd. excav., 84,700 ft. 6- to 32-in. tile. H. Dunaway, co. engr.

Minn., Gaylord—Ditch—Until Oct. 12 by Sibley Co., Henderson, building Judicial Ditch No. 8 involving 37,474 ft. 7- to 12-in. tile. About $33,581. F. Heppenstedt, aud.

Minn., Lesueur Center—(Official)—Ditch—Until Oct. 24 by T. F. Dunn, Lesueur Co. aud., building Co. Ditch No. 45, involving 156,545 cu.yd. excav. About $22,830.

Minn., Mankato—Ditch—Until Oct. 19, by Blue Earth Co., building Co. Ditch No. 50, involving 84,432 cu.yd. excav., 81,790 ft. 8- to 38-in. tile. C. L. Kennedy, aud. R. H. Allison, engr.

Minn., St. Peter—Ditch—Until Oct. 16, by Nicollet Co., building Co. Ditch No. 29, involving 26,610 ft. 6- to 20-in. tile. About $10,082. W. H. Holz, co. aud.

Kan., Belvue—Ditches—Until Oct. 8 by Bd. Dir. Bellevue D.D. building drainage ditches and change of channel, Lost and Welch Creek River Dists. V. R. Parkhurst, 627 Kansas Ave., Topeka, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ill., Paxton—Ditch—Ford Co. let contract building ditch, subdistrict No. 2, Union D. D., to W. F. Sturenburg, De Kalb, 0.179c. per ft.

★Cal., Meridan—Drainage — Sacramento River West Side Levee Dist. and Rec. Dist. No. 70, let contract clearing strip through Butte Slough, to Kenyon & Whitman, Forum Bldg., Sacramento, $100,000.

Cal., Oakdale—Canals—Oakdale Irrigation Dist. will spend $35,000 to build concrete canals and replace flume. Work will be done by day labor. Noted Sept. 20.

INDUSTRIAL WORKS

Proposed Work

R. I., Woonsocket—Tips Motor Co., recently incorporated with $400,000 capital stock, plans to build factory. M. Tips and others, incorporators.

Conn., Bridgeport — United States Airplane Co., recently incorporated, plans to build plant. About $500,000.

N. Y., Brooklyn—R. Freedman, 4185 Fulton St., had plans prepared by E. C. Georgi, archt., 4185 Fulton St., for 1-story, 157 x 220-ft. garage. About $50,000.

N. Y., Brooklyn—Lewis Constr. Co., 361 Fulton St., had plans prepared by S. Millman & Sons, archts., 1780 Pitkin Ave., for 1-story, 105 x 148-ft. brick garage, on Ocean Parkway. About $65,000.

N. Y., Buffalo — Standard Oil Co., 26 Bway., New York City, plans warehouse at Atlas Works, 1103 Elk St. About $100,000.

N. Y., New York—Empire Trust Co. had plans prepared for 4-story, 54 x 94-ft. brick garage at 51-5 Lexington Ave. About $75,000. L. W. Baldwin, 120 Bway., pres. P. J. McKeown, 217 Bway., archt,

N. Y., New York—Fifth Ave. Coach Co., 10 East 102nd St., had plans prepared by J. C. McGuire, engr., 50 Church St., for 4-story, 200 x 400-ft. factory, 133rd St. and Bway. Noted Sept. 27.

N. Y., New York—Schencke Piano Co., 273 Rider Ave., plans 3- to 5-story, 62 x 90-ft. factory, 137th St. and Willow Ave. About $75,000. A. E. Davis, 258 East 138th St., archt.

N. Y., Rochester—Bausch & Lomb Optical Co., 1635 St. Paul St., had plans prepared 5-story, 120 x 400-ft. rein.-con. factory, St. Paul, Lowell and Martin Sts.

N. J., Newark — Newark Gear Cutting Machine Co., 69 Prospect St., plans 4-story, 42 x 50-ft. machine shop, office and pattern storage building. H. E. Eberhardt, pres.

N. J., Newark—J. Oschwald, Plane and Hackett Sts., plans 2-story, 65 x 239-ft. rein.-con. automobile service station. About $55,000.

N. J., West New York—(Weehawken P. O.)—New Process Rubber Co., 488 Bergenline Ave., recently incorporated, plans to build automobile tire factory. About $50,000.

Pa., Phila.—F. A. Poth & Sons soon lets contract 1-story, 44 x 50 ft. boiler house. About $100,000. E. J. Poth, 31st and Jefferson Sts., pres. Chas. Casper, 925 Chestnut St., archt.

Pa., Pittsburgh — American Locomotive Co., Seymore and Beaver Sts., plans 1- and 2-story steel and concrete paint and erecting shops. About $67,500.

Pa., Pittsburgh—J. Mellor & Sons Printing Co., 128 46th St., plans 4-story, steel and concrete addition to plant on 46th and Hatfield Sts.

Pa., Pittsburgh—National Supply Co., Union Bank Bldg., plans to build warehouse, Preble Ave., Adams and Delaware Sts. About $50,000.

Pa., Pittsburgh—Pennsylvania Chocolate Co., 5850 Center St., plans 6-story factory addition at 5850 Center Ave. S. S. Marion, 5 South Front St., pres. Ballinger & Perrot, archts., 17th and Arch Sts., receive bids about Oct. 10.

Pa., Reading—Reading Ry. plans roundhouse. About $175,000. S. T. Wagner, Old Colony Bldg., ch. engr.

Md., Sharptown — Eastern Shore Shipbuilding Corp. plans shipbuilding plant. About $150,000. R. R. Livingston, 2 Rector St., New York City, pres. Hamilton & Chambers Co., 29 Bway., New York City, archt.

W. Va., Parkersburg—Kahn & Fieldman, 25 Madison Ave., New York City, recently incorporated, plans 2-story, 50 x 500-ft. silk mill here.

Ala., Mobile—See "Miscellaneous."

La., Shreveport—Republic Oil & Refining Co. plans to establish oil-refining plant here. About $250,000.

Tenn., Kingsport—White Oak Veneer & Lumber Corp. plans to rebuild plant recently destroyed by fire. Loss, $50,000.

Tenn., Nashville—See "Miscellaneous."

O., Cincinnati—P. W. Drackett & Sons Co. plans 2- or 4-story, 75 x 200 ft. and 2- or 4-story, 40 x 80 ft. chemical plant, Spring Grove Ave. P. W. Drackett, Pickering Bldg., pres. R. E. Bostrum, archt., Pickering Bldg., soon receives bids.

O., Cincinnati—Rapid Electrotype Co., Canal St., increased its capital stock from $50,000 to $150,000 and plans factory, McMicken Ave.

O., Cincinnati—Worthington Pump Co., 1504 1st Natl. Bank Bldg., plans 1-story, 50 x 308 ft. machine shop. About $60,000. Austin Co., 14230 Euclid Ave., Cleveland, archts.

O., Cleveland—Cleveland Electric Illuminating Co. plans 1-story, 82 x 122-ft. and 160 x 195-ft. power house at 720 E. 20th St. About $150,000. S. Scoville, Illuminating Bldg., pres. P. L. Cobb, 408 Illuminating Bldg., engr.

O., Cleveland—Ohio Bronze Powder Co., 1120 East 132nd St., increased its capital stock from $50,000 to $200,000 and plans 2-story, 30x100-ft. factory.

O., Cleveland—A. P. Schraner Pattern Works Co., 430 Prospect Ave., N. W., whose factory was recently destroyed by fire, having plans prepared by F. M. Case, engr., for 2- and 3-story, brick and concrete factory, Pave Ave., N. E., and East 33rd St. About $50,000.

O., Lorain—Cromwell Steel Co., Lorain, plans large steel manufacturing plant on site of steel mills on east side of Black River.

Mich., Detroit—Armour & Co., 6th and West Jefferson Aves., having plans prepared for packing and cold storage plant near freight yards of Pennsylvania Lines West of Pittsburgh. About $1,000,000.

Ill., Chicago — C. J. Baillergeon, 710-8 South Dearborn St., will build 2-story, 208 x 241-ft. garage, store, bowling alley and billiard parlor. About $150,000.

Wis., Eau Claire—Standard Oil Co. plans to build plant. About $100,000.

Wis., Grand Rapids—Jackson Milling Co. retained W. E. Ule, engr., to prepare plans for hydroelectric power plant and dam on Wisconsin River. About $500,000.

Wis., Superior—Commercial Club will organize company with $100,000 capital stock to build macaroni factory. Wm. Clendenin, 1315A Hammond Ave., interested.

Wis., West Allis—Kempsmith Mfg. Co., 36th Ave. and Burnham St., plans 1-story, 100x200-ft. concrete addition to factory. About $65,000. Brust & Phillipp, Free Press Bldg., Milwaukee, archts.

Wash., Kirkland—Three Ply Veneer & Box Board Co., Boston Blk., Seattle, having plans prepared for 2-story factory here. About $250,000.

Wash., Tacoma—Chicago, Milwaukee & St. Paul R.R. plans sub-station in connection with electrification of line between Othello and Tacoma. About $160,000. C. F. Loweth, Chicago, ch. engr.

Cal., Arcata—Central California Creameries Co. plans condensed-milk plant. About $100,000.

Industrial Work (Continued)

Cal., Los Angeles—Pioneer Commercial Auto Co. having plans prepared by L. A. Smith, archt., 621 Investment Bldg., 2-story, 97x155-ft., rein.-con. garage, 18th and Fugueroa Sts. About $50,000.

Cal., Redwood City—New York, San Francisco & Hongkong Steamship Co. purchased 10-acre site for shipbuilding plant.

Que., Montreal—Tereault Shoe Mfg. Co., 331 Demontigny St., E., soon lets contract for shoe factory. About $150,000. M. Dufresne, 486 La Salle Ave., Maisonneuve, archt.

Ont., Copper Cliff—Canadian Copper Corp. will increase its capital stock to $10,000,000 and plans 3000-ton mill.

Ont., Hamilton—American Can Co., Emerald St., N., soon lets contract for addition to factory. About $125,000. K. Bethune, mgr.

Ont., Toronto—Imperial Munitions Bd., Royal Bank Bldg., King and Yonge Sts., plans factory on Wallace Ave. About $100,000.

BIDS DESIRED

Ky., Covington—(Official)—Until Nov. 30 by City for franchise right and privilege to build, operate and maintain power houses, poles, etc. L. L. Applegate, recdr.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., West Springfield—Gilbert-Barker Mfg. Co., Union St. and Cold Spring Ave., let contract 40x90-ft. concrete, brick and steel addition for power plant to H. Wales Lines Co., Meriden, Conn. $75,000.

★Conn., Hartford—G. Fox & Co., Church and Pratt Sts., let contract 8-story, 44x120-ft. and 43x55-ft. concrete warehouse and boilerhouse to J. Stewart & Co., Inc., 30 Church St., New York City, $100,000.

★N. Y., Lockport—United Paper Board Co., 171 Madison Ave., New York City, let contract 1-story, 35 x 100 ft. power house to Curran & Swartout, 440 Granite Bldg., Rochester.

★N. Y., Syracuse — Crucible Steel Co., West Fayette and Magnolia Sts., let contract brick and steel factory addition to J. D. Taylor Constr. Co., 115 South Salina St. About $60,000.

★N. J., Passaic — New York Belting & Packing Co., 91 Chambers St., New York City, let contract 5-story, 90 x 250-ft. brick and rein.con. factory to J. W. Ferguson Co. 952 Market St., Paterson. Noted Aug. 23.

★Ga., Atlanta—Georgia Ry. & Power Co. let contract 3-story, 60 x 160-ft. rein.con. warehouse to A. V. Gude, Grant Bldg., $50,000.

★O., Columbus—Commercial Impvt. Co., Commerce Bldg., let contract 1-story factory, 3rd and Spring Sts., to E. Elford, 104 North 3rd St., $50,000.

★Ill., Chicago—Chicago Short Line R.R. let contract roundhouse, repair shop and office to J. H. Prusener, 3811 North Lawndale Ave. About $50,000.

★Ill., Chicago — Fitzpatrick Bros. Soap Co. let contract 2-, 3-, and 4-story soap factory to Stressinreuter Bros., 3020 South Halsted St. About $90,000.

★Ill., Lyons—Inter-Ocean Refining Co., 332 South Michigan Ave., Chicago, will build 1-story oil refining plant, Joliet Rd. and West 4th St., near Lyons, by day labor. About $400,000. B. S. Reid, secy.

★Wis., Sheboygan — Northern Furniture Co., South Waten and North Jersey Sts., let contract 6-story concrete addition to Wm. Guenther & Sons Co., 1621 Huron Ave. Noted Sept. 20.

★Ia., Des Moines—Standard Oil Co. let contract 2-story warehouse, garage barn and filling station to F. Weity Co., 713 Mulberry St. About $250,000.

Minn., Minneapolis—See "Buildings."

★Neb., Omaha—J. F. Fitzgerald, 340 Bee Bldg., let contract 1-story, 132x132-ft. garage, 16th and Leavenworth Sts. to Gehrke & Strauser, 2209 Franam St. About $100,000.

★Mo., Kansas City—Kansas City Light & Power Co., Grand Ave., let contract foundation of $4,000,000 unit to new $10,000,000 power plant to Foundation Co. of New York, 233 B'way., New York City. Noted Sept. 27.

★Tex., San Antonio—Southern Ice & Cold Storage Co., 110 Guenther St., let contract building factory to York Mfg. Co., York, Pa., $165,000.

★Colo., Denver—Gas & Electric Co. let contract 1-story, 60 x 160-ft. boiler house and stack to H. H. Kerr, 152 Washington St. About $56,000.

★Ariz., Tempe—Tempe Milling Co., Mill Ave., let contract 3-story, 40 x 75-ft. warehouse, 4-story, 40 x 40 ft. mill building, 5-story, 20 x 40 ft. bins, etc. to J. C. Steel, 1013 West Jefferson St.

★Cal., Orange—Santiago Orange Growers Assn. let contract 143 x 170-ft. precooling and packing plant, West Palm St., to H. C. Clarke Co., 1101 East 5th St., Los Angeles, $50,059. Noted May 17.

★Ont., Hamilton—Armour & Co., let contract brick ice plant, Wentworth St., to Piggott Healey Co., 36 James St., S., $50,000.

BUILDINGS

Proposed Work

Mass., Haverhill—Hospital—Gale Hospital had plans prepared by H. Colby, archt., for addition. About $56,000. Dr. H. M. Crittenden, secy.

Mass., Somerville — High School — Bd. Educ. had plans prepared 2-story, 80 x 86 ft. About $90,000. G. E. Whitaker, chn. W. T. Littlefield, 9 Hamilton Pl., Boston, archt.

Conn., Middletown — Hospital Wards — State soon receives bids. About $125,000. H. S. Noble, Hartford, supt. Johnson & Bruns, Inc., 26 State St., Phila., Pa., archts.

N. Y., Allegheny—Science Hall—St. Bonaventure College plans, 4-story, 60 x 140 ft. brick. About $50,000.

N. Y., Binghamton—School—Bd. Educ. plans altering and repairing Oak St. School, 2-story. About $50,000. E. J. Kelly, supt. C. M. Carlton and L. J. Kaley, O'Neill Bldg., archts.

N. Y., Buffalo—Freight Station—Pennsylvania R.R. plans, 30 x 420 ft., Louisiana and Carroll Sts. About $150,000. A. C. Shand, Broad St. Sta., Phila., ch. engr.

N. Y., Glens Falls—Library and Park—Crandall Trust, c/o O. G. Smith, 178 Glen St., plans improvement. About $75,000. C. A. Platt, 101 Park Ave., New York City, archt.

N. Y., Jamestown — Temple — Masonic Temple Assn. plans 6-story. F. Bush, chn. A. J. Bodker, 62 West 45th St., New York City, archt.

N. Y., Rochester—Club House—Knights of Columbus plan, 3 story, 90 x 200 ft. brick and steel. About $150,000. Gordon & Madden, Sibley Bldg., archts.

N. Y., Syracuse—Laboratory—Syracuse University plans, 5-story, 40 x 120 ft. brick and steel. About $125,000. J. R. Day, chancellor. E. A. Hallenbeck, 307 Maple St., archt.

N. J., Asbury Park — Church — First Methodist Episcopal Congregation plans rebuilding. About $100,000. L. K. Willman, Grand and 2nd Ave., pastor. L. E. Smith and H. E. Warren, 2 West 47th St., New York City, archts.

N. J., Camden—High School—Bd. Educ. had plans prepared by C. S. Adams, archt., 3-story. About $500,000.

N. J., Red Bank — School — Bd. Educ. plans 2-story, 75 x 123-ft. About $100,000. R. A. Strong, pres. E. A. Arend, Kinmouth Bldg., Asbury Park, archt.

N. J., Red Bank—Store—C. Lewis, 324 Broad St., had plans prepared. About $50,000.

Pa., Bloomsburg—Bank and Office—Columbia County Trust Co. having plans prepared by V. T. Ritter, archt., 1st Natl. Bank Bldg., Huntington, W. Va., for 4-story, 24 x 120 ft.

Pa., Chester—(Official)—Club House—Knights of Columbus receiving bids about January, 3-story, 60x60-ft., about $50,000. C. W. Brazer, Crozer Bldg., archt. Noted Sept. 27.

Pa., Olney—(Phila. P. O.)—Bank—Olney Bank plans 1-story, 40 x 80 ft. About $75,000. T. Tansey, 5th St. and Tabor Rd., pres. Bothwell & Crugger, Olney Park, Phila, archts.

Pa., Olyphant — Church — St. Patrick's Congregation had plans prepared by J. J. Howley, archt., Scranton. About $50,000.

N. C., Charlotte—High School—Bd. Educ. plans 2-story, 150 x 225 ft. About $150,000. J. F. Leitner, archt., Healy Bldg., Atlanta, Ga., soon receives bids.

N. C., Greensboro — Bank and Office — American Exchange National Bank, having plans prepared, 10-story. About $200,000.

Ga., Atlanta — Sunday School — Grace Methodist Episcopal Congregation having plans prepared. About $75,000. W. McElreath, chn. bldg. com.

Tenn., Knoxville—Schools—See "Water-Works."

Ky., Louisville—Hotel—Central Hotel Co. plans 8-story, steel; 150 rooms. Joseph & Joseph, Republic Bldg., archts.

O., Akron—Hospital—Akron City Hospital plans 7 additional units, brick, steel and concrete. About $750,000.

O., Cincinnati—School—Bd. Educ. had plans prepared, 2-story, concrete and stone, 3042-72 Durrell Ave. About $200,000.

O., Cleveland—Schools, Hospital, etc.—City election Nov. 6, to vote on $3,000,000 bond issue to build schools, $1,000,000 for hospital and sanitariums and $1,250,000 for jail.

O., Cleveland—Schools—Bd. Educ. had plans prepared by W. R. McCornack, archt., East 6th St. and Rockwell Ave., additions to Mt. Pleasant and Chesterville Schools. About $71,400 and $67,800 respectively.

O., Columbus—Hospital—Children's Hospital, Miller Ave. and Franklin Park, having plans prepared for hospital in Livingston Park. Richards, McCarthy & Balford, Hartman Bldg., archts.

O., Columbus—Hotel—Grant Realty Co. soon lets contract 12-story, brick and terra cotta, Town St. and Grant Ave. About $280,000. M. Peterman, Hartman Bldg., archt.

O., Columbus—Schools—City plans $3,500,000 bond issue to build, improve and enlarge various high and elementary schools.

O., London—Penitentiary—Penitentiary Comn. plans 2-story. About $3,000,000. S. J. Black, Upper Sandusky, secy. Richards, McCarty & Bulford, Hartman Bldg., Columbus, archts.

O., Norwalk—School—Bd. Educ. having plans prepared by J. E. Scott, archt., for 2-story. About $115,000. J. A. Sipher, pres.

O., Plymouth—High and Grade School—City plans election soon to vote on $50,000 bond issue for 2-story. C. S. Walker, clk. bd. educ. Althaus & Jones, Market Bldg., Mansfield, archt.

Mich., Detroit—Y. W. C. A. soon lets contract 10-story building, Adams Ave. and Witherell St.

Ill., Chicago—Hotel—Blackstone Co., 50-58 East 7th St., plans 21-story, brick. About $1,000,000. Marshall & Fox, engrs.

Ill., Chicago—Office—Old Colony Insurance Co., 37 West Van Buren St., plans 16-story, 50 x 166-ft., 166-72 West Jackson Blvd.

Ill., Chicago — School and Hall — St. Bartholomew's Parish plans, Addison St. and Lavergne Ave. About $50,000. Rev. W. O'Shea, pastor.

Wis., Green Bay—School—City Council passed ordinance to issue $175,000 bonds for rebuilding Whitney School, recently destroyed by fire.

Wis., Milwaukee—Depot and Freight House—See "Railways."

Wis., Milwaukee — Hospital — Columbia Hospital receiving bids in December for 2nd unit, Hartford and Maryland Aves. About $250,000. F. L. Sivyer, chn. executive com. Schuchardt & Judell, 428 Jefferson St., archts.

Buildings (Continued)

Wis., Wales—Infirmary—State plans addition to State Tuberculosis Sanitarium. About $100,000. M. J. Tappins, secy. bd. control. A. Peabody, Capitol Bldg., Madison, archt.

Ia., Grand View—(Des Moines P. O.)—School—Grand View Dist. plans, 2-story, 60 x 140 ft., brick. About $70,000. H. V. Stineman, secy. Keffer & Jones, 610 Youngerman Bldg., Des Moines, archts.

Ia., Spencer—School—Bd. Educ. plans alterations and additions. About $70,000. F. A. Cook, secy. J. D. Chubb, 109 North Dearborn St., Chicago, archt.

Neb., Lincoln—Hotel—Nebraska Bldg. & Investment Co., 130 South 13th St., plans 12-story, 108 x 150-ft. stone, steel and rein.-con. About $500,000. R. E. Schaaf, pres. J. W. Johnson, Security Mutual Life Bldg., archt.

N. D., Fargo—High School—Bd. Educ. plans altering and repairing. About $70,000. R. Guthrie, secy. W. B. Ittner, archt., Bd. Educ. Bldg., St. Louis, Mo., receives bids about Nov. 15.

Mo., Kansas City—School—Dominican Fathers plan 100 x 128 ft. school, auditorium and gymnasium. About $60,000. White & Dean, archts., 31 Bellefontaine St., soon receives bids.

Tex., San Antonio — Temple — Scottish Rite Masons rejected bids. 104 x 1151ft., brick and steel. About $180,000. New bids. W. H. McCullough, 420 San Antonio St., secy. Hubbell & Greene, North Texas Bldg., El Paso, archt.

Okla., Elk City—High School—School Dist. No. 6 voted $50,000 bond issue for school. Address J. G. Scott.

Okla., Oklahoma—School—City plans election to vote on $50,000 bond issue to build school.

Okla., Oklahoma — Station — St. Louis & San Francisco R.R. soon lets contract 2-story, 130 x 146-ft. brick and rein.-con. About $300,000. E. D. Levy, gen. mgr. Lebenbaum, Marx & Vigeant, 175 West Jackson Blvd., Chicago, archts.

Okla., Tulsa—Hotel—Fay D. Pickens, 1230 South Carson St., and associates, soon receive bids, 12-story. About $1,000,000.

Okla., Tulsa—Church—First Christian Congregation having plans prepared by Van Slyke & Woodruff, archts., 607 Burk Burnett Bldg., Ft. Worth, Tex., stone, brick and rein.-con. About $100,000.

Wash., Olympia—(Official)—High School—Bd. Educ. receives bids about Dec. 1, 3-story; about $100,000. J. H. Wohleb, Capitol Natl. Bank Bldg., archt. Noted Sept. 20.

Ore., Portland—School—Bd. Educ. having plans prepared, 2-story, brick, East Pine and East 16th Sts. About $175,000.

BIDS DESIRED

Mass., Middletown — (Official)—Hospital—Until Nov. 25, by Essex Co. Comrs., Court House, Salem for 5 2-story buildings. J. H. Bickford, 110 State St., Boston, archt. Noted Sept. 20.

N. J., Red Bank—School—Until Oct. 18, by Bd. Educ., 3-story. About $60,000. F. M. Truex, 1170 Broadway, New York City, archt. Noted Aug. 16.

Ind., Ft. Wayne—Hospital—Until Oct. 23 by Hamilton Co., for 2-story, 30 x 80-ft. About $50,000. W. J. Johnson, aud. C. Heatherhogg, Hamilton Natl. Bldg., archt.

Kan., Abilene—High School—Until Oct. 24, by Bd. Educ. About $90,000. A. M. Curry, clk. W. H. Sayler, Gumbel Bldg., Kansas City, Mo., archt.

Kan., Smith Center — (Official) — Court House—Until Oct. 23, by Bd. Comrs. Smith Co. About $85,000. T. W. Williamson & Co., 416 Central Natl. Bank Bldg., Topeka, archts. Noted June 21.

Kan., Wichita—Church—Until Oct. 17, by First Methodist Episcopal Congregation, 1-story, 100 x 130 ft. About $85,000. J. Gaisford, Memphis, Tenn., archt.

Tex., Beaumont—Freight Depot—Until Oct. 15, by Gulf Coast Line, American Trust Bldg., Neches and Bowei Sts. About $50,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Clinton—School — St. John's Church Society let contract, 2-story, to McDermott Bros., 18 Cedar St., Worcester, $50,000. Noted Apr. 26.

★Conn., Bridgeport— School — Bd. Educ. let contract 2-story, 109 x 230-ft. Steuben and Gilmore Sts., to W. Martin & Son, Franklin Bldg., $232,942.

★Conn., Hartford—City Hall—City let contract steel work in restoration of old city hall to Berlin Constr. Co., East Berlin, $100,000.

★N. Y., Brooklyn—Brooklyn Training School for Girls, 1483 Pacific St., let contract 2- and 3-story 30 x 105 ft., 25 x 45 ft. and 23 x 35 ft. to E. E. Paul Co., 101 Park Ave., New York City. Noted May 10.

★N. Y., Poughkeepsie—School—Bd. Educ. let contract 2-story school, to be known as Warring School, Smith and Mansion Sts., to C. Van Akin, 191 Elmendorf St., Kingston. About $50,000.

★N. Y., Rochester—Church—Dewey Ave. Presbyterian Congregation let contract 90 x 146-ft. brick, to A. Friederick & Sons, 710 Lake Ave., $75,000.

★N. Y., Rochester — High School — Bd. Educ. let contract, at Exposition Park, to Gorsline & Swan Constr. Co., Power Bldg., $387,000.

★N. J., Morristown — High School — Bd. Educ. let contract to Reeve & Burr, Morristown. About $54,206.

★N. J., Rahway—Y. M. C. A. let contract new building to Carlton Co., Inc., Longacre Bldg., New York City. About $99,845.

★Ky., Melbourne — Administration and Mother House—Sisters of Providence let contract 3-story, 92 x 259 ft. to McDermott & Maxon Co., Builders Exch. Bldg., Cincinnati. About $200,000.

★Ill., Chicago—Hotel—C. Morse, Jr., 900 South Wabash Ave., let contract 9-story, 60-70 Scott St. to McLeeman Constr. Co., Chicago, $375,000.

★Ill., Kewanee — Hospital — City Pub. Hospital Assn. let contract 2-story, 40 x 120-ft. to F. L. Boher, Abingdon. About $75,000. Noted Aug. 23.

★Wis., Kaukauna—Church—St. Nicholas Congregation let contract to J. H. Geniesse Co., 820 South Jackson St., Green Bay. About $75,000.

★Wis., West Salem—High School—Bd. Educ. let contract to P. Nelson, La Crosse, $65,000. Noted July 26.

★Minn., Anoka—Chapel and Assembly—State Bd. Control let contract 2-story addition to Cameron & Co., 505 Ryan Bldg., St. Paul, $54,562. Noted Sept. 20.

Minn., Mineapolis—Hospital—Bd. Charities and Corrections, Court House, received low bids 3-story, rein-con. hospital and 1-story, 25 x 40-ft. rein.-con. power house, from R. J. Cheney & Co. 716 11th Ave., $86,748; Madsen & Peterson, 802 Plymouth Bldg., $94,200; F. G. McMillan, 2 S. E., 5th St., $94,554. Noted June 14.

★Minn., Morris—Dining Hall and Gymnasium—West Central Agricultural Station let contract 2-story, 88 x 92-ft. to H. J. Frandsen, 510 Rice St., St. Paul. About $65,000.

★Neb., Omaha — Exchange — Nebraska Telephone Co., 18th and Douglas Sts., let contract 15-story, 100x132-ft., brick and tile to Lanquist & Illsley, 1100 North Clark St., Chicago. About $750,000. Noted Sept. 13.

★S. D., Rapid City—School—Bd. Educ. let contract 1-story, 121 x 131-ft. to Anderson-Taylor Constr. Co., 534 Lumber Ex., Minneapolis. About $57,000.

★Tex., Carlsbad—Dormitory—State Tuberculosis Sanitarium let contract to McGregor & Henger, 421 Mills Bldg., El Paso. About $145,360. Noted July 19.

★Okla., Tulsa—Office—J. S. Cosden, Daniels Bldg. let contract 15-story. 60 x 100-ft. rein.-con. to A. Fuller Constr. Co., 418 Dwight Bldg., Kansas City, Mo., $75,000.

★Wash., Spokane—Orphan's Home—L. W. Hutton, Hutton Bldg., let contract, 3-story to P. L. Peterson, Hutton Bldg., $200,000. Noted Sept. 27.

★Cal., Escondido—Bank, etc.—L. B. Thompson, Chicago, let contract 3-story, 62 x 225 ft., bank, store, lodge hall and apartment building to Geo. Flickett, 935 West 35th Pl., Los Angeles. About $55,000.

★Cal., Oroville—High School—Bd. Trustees, Oroville High School, let contract to C. J. Guth, 28th and L Sts., Sacramento. About $63,500. Noted Sept. 13.

★Que., Montreal—Office—Provincial Government let contract 1-story addition to J. B. Gratton, 419 Labrecque St. About $75,600.

★Man., Foxwarren—School—Birtle Municipality let contract to Progress Constr. Co., Ltd., 88 Provender St., Winnipeg. About $50,000.

★Man., Winnipeg—Office—French Syndicate, 415 Paris Bldg., let contract to Carter-Halls-Adlinger, Union Bldg., $200,000.

FEDERAL GOVERNMENT WORK

Proposed Work

Mass., Boston — Hospital — War Dept., Wash., N. D. Baker, secy., plans, 1-story. About $500,000.

Mass., Leominster — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., preparing plans. About $90,000.

N. Y., New York—Hospitals—War Dept., Wash., N. D. Baker, secy., plans to build 3 1-story hospitals. About $1,500,000.

Wash., D. C.—Hospital—War Dept., Wash., N. D. Baker, secy., plans, 1-story, in Soldier's Home Grounds. About $500,000.

Ga., Forsyth—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., allowed J. H. Wilder, Columbus Rd., Macon, to withdraw his bid. All other bids rejected. Noted Sept. 20.

Cal., San Diego—Buildings—War Dept., Wash., D. C., N. D. Baker, secy., having plans prepared by B. Goodhue, archt., 2 West 47th St., New York City, for 20 buildings, including administration building, drill hall, etc., to be erected on 732-acre site, to be reclaimed by dredging, for marine brigade post. About $600,000 available for work, $305,000 for dredging. U. S. Engr., Central Bldg., Los Angeles, soon receives bids dredging 1,250,000 cu.yd.

BIDS DESIRED

N. Y., Brooklyn—Power House—Until Oct. 31, by Bureau Yards and Docks, Navy Dept., Wash.

Pa., Ft. Mifflin—Mine Storage Building—Until Oct. 15 (Extension of date) by Bureau Yards and Docks, Navy Dept., Wash. Noted Sept. 27.

Pa., Hollidaysburg — Post Office — Until Oct. 31, by J. A. Wetmore, superv. archt., treas. dept., Wash.; advertised in this issue.

Pa., Phila.—Buildings—Until Oct. 8 by Bureau Yards and Docks, Navy Dept., Wash., constructing galvanizing plant, oxy-acetylene generating plant, engine house, 2 locker houses, etc.

Md., Indian Head—Wharf—Until Oct. 8 by Bureau Yards and Docks, Navy Dept., Wash.

N. C., Burlington — Post Office—Until Nov. 5, by J. A. Wetmore, superv. archt., treas. dept., Wash.

La., New Orleans—Crane—Until Oct. 8 by Bureau Yards and Docks, Navy Dept., Wash., furnishing 10-ton bridge crane in pattern and machine shop, Naval Station.

Ky., Louisville—Power House—Until Oct. 31, by U. S. Engr. Office, Louisville, building at Lock No. 41; advertised in this issue.

O., Cincinnati — Maneuver Boats — Until Nov. 2, by U. S. Engr. Office, Cincinnati, building 2 steel hull maneuver boats with machinery; advertised in this issue.

Ind., Valparaiso—Post Office—Until Nov. 2, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Mich., Detroit—Construction Material—Until Nov. 1, by Lighthouse Inspector, 341 P. O. Bldg., Detroit, furnishing c.-i. stairs and lantern deck, about 20 tons structural steel work, c.-i. laterns for Sand Hill Light Sta.; advertised in this issue.

Mich., Detroit—Construction Material—Until Oct. 15, by Lighthouse Inspector, 341 P. O. Bldg., Detroit, furnishing 750 cu.ft. cut-stone work, about 85 M face brick, 150 M common brick for Sand Hills Light Sta.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston — Battery Shed — Bureau Yards and Docks, Navy Dept., Wash., received low bids building at Navy Yard, (a) net price, (b) deduct if heating is omitted; Coleman Bros. Marginial St., Chelsea; (a) $31,900, (b) $4500; C. M. Leach,

Federal Government Work (Continued)

P. O. Box 2285, Devonshire St., (a) $32,256, (b) $4256; Hamilton & Chambers, 29 Bway., New York City, (a) $33,500, (b) $4000.

★Mass., Hingham—Heating Temporary Buildings—Bureau Yards and Docks, Navy Dept., Wash., let contract to Cleghorn Co., 54 Batterymarch, Boston, $19,800.

★Mass., Hingham—Temporary Buildings—Bureau Yards and Docks, Navy Dept., Wash., let contract to G. A. Fuller Co., 710 Bd. Trade Bldg., Boston, $28,766.

★Conn., New London—Additions to Barracks—Bureau Yards and Docks, Navy Dept., Wash., let contract to R. H. Arnold Co., Woodward Bldg., Wash., D. C., $27,990.

Conn., New London — Crane — Bureau Yards and Docks, Navy Dept., Wash., received low bids furnishing 30-ton revolving crane, Naval Submarine Base, from McMyler Inter-state Co., Bedford, O., $25,500; V. R. Browning & Co., 17701 Lake Shore Bldg., Cleveland, $50,000.

★N. Y., Brooklyn—Steam Heating Apparatus—Bureau Yards and Docks, Navy Dept., Wash., let contract installing at Sect. Base No. 6, Navy Dept., to Hopson & Chapin Manufacturing Co., New York City, $23,300.

N. Y., Cohoes—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, (a) limestone, (b) sandstone, from Oscawana Bldg. Co., 101 Park Ave., New York City, (a) $80,970, (b) $85,000; W. H. Fissell & Co., 1328 Bway., New York City, (a) $86,000, (b) $92,000; Feeney & Sheehan Co., 164 Montgomery St., Albany, (a) $86,225, (b) $87,225. Noted Aug. 16.

★Wash., D. C.—Aviation Camp—War Dept. let contract building addition to camp at Hampton Rds. to J. G. White, Hampton, Va.

★Wash., D. C.—Barracks and Quarters—Quartermaster Corps, War Dept., let contract to P. F. Gormerly, Union Trust Bldg., $500,000 to $1,000,000.

Wash., D. C.—Jet Condensers and Pumping Equipment—Bureau Yards and Docks, Navy Dept., received low bids furnishing at various navy yards from Alberger Pump & Condenser Co., 140 Cedar St.; E. J. Smith, 30 Church St.; A. S. Cameron Steam Pump Co., 11 Broadway, all of New York City.

★Wash., D. C.—Laboratory—Bureau of Standards, Wash., let contract 4-story rein.-con. to Turner Constr. Co., 242 Madison Ave., New York City. Noted June 14.

★Wash., D. C.—Motor-Generator Sets, Accessories, etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract, furnishing at Phila. and San Pedro, Cal., Navy Yards, to General Electric Co., River Rd., Schenectady, N. Y., $51,490; electric equipment, Boston, Mass., and Mare Island (Vallejo) P. O., Cal., to Allis Chalmers Mfg. Co., West Allis, Wis., $51,490. Noted Sept. 20.

Wash., D. C.—Coast Guard—Navy Dept., U. S. Coast Guard Headquarters, received low bid for new building and accessories at Coast Guard Station No. 166, Wash Woods, N. C., from G. W. Wines, East Orange, N. J., $18,886, time, Aug. 15, 1918; J. W. Martin, Elizabeth City, N. C., $20,100, time, Jan. 1, 1919; Evans & Meekins, Manteo, N. C., $21,500, time, Dec. 1, 1918. Noted Aug. 30.

★S. C., Charleston—Storehouse—Bureau Yards and Docks, Navy Dept., Wash., let contract to R. H. Arnold, Woodward Bldg., Wash., D. C., $217,300. Noted Sept. 13.

★Fla., Black Point—(Outside of Jacksonville)—Quartermaster Cantonment—Quartermaster Corps, War Dept., let contract to A. Bentley & Son, Belmont Ave. and 13th St., Toledo, $1,000,000, cost plus per cent. basis.

★Miss., Vicksburg — Levee Work — 3rd Mississippi River Dist. let contract 1,100,000 cu.yd. levee work, to G. F. Ramsey, 157 Clark Pl., $370,000 and N. T. & E. M. Lawrence, $390,000; 400,000 cu.yd. to Roach Clark & Co., North Memphis Savings Bank Bldg., all of Memphis, Tenn., $130,000. Noted Aug. 30.

★Tenn., Memphis—Aviation Camp—War Dept. rescinded contract let to T. Harmon & Co. and relet same to E. A. Wickham & Co., 19 Scott St., Council Bluffs, Ia.

Ky., Glasgow—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids (a) limestone, (b) sandstone; H. G. Mitchell, Scottsburg, (a) $40,500, (b) $40,800; G. W. Stiles Constr. Co., 289 South La Salle St., Chicago, (a) $42,643; E. A. Steininger Constr. Co., Victoria Bldg., St. Louis, Mo., (a) $43,154. Noted Aug. 23.

Ind., Kendallville—Post Office—J. A. Wetmore, superv. arch., treas. dept., Wash., received low bids, Sept. 21, (a) limestone, (b) sandstone, from E. A. Steininger, Victoria Bldg., St. Louis, Mo., (a) $46,300; Schmidt Bros. Constr. Co., 105 North Clark St., Chicago, (a) $48,900; W. H. Fissell & Co., 1328 Bway., New York City, (a) $55,850, (b) $56,850. Noted Aug. 16.

★Ill., Great Lakes — Wiring — Bureau Yards and Docks, Navy Dept., Wash., let contract outside wiring, at Naval Training Sta., to W. A. Jackson, 37 West Vanderbilt St., Chicago, $27,150.

★Tex., San Antonio—Warehouse—War Dept., Wash., let contract at Naval Air Sta., to Stone & Webster, 147 Milk St., Boston, Mass.

N. M., Farmington—Bridge—Cato Sells, comr. Indian Affairs, Wash., received low bid building steel highway bridge from Monarch Engine Co., 312 17th St., Denver, Colo., $26,790 entire structure, including trestle and approaches, not including earth fill; $19,250 steel superstructure; $4895, 2 abutments, including steel piling and 2 wings; $3227 open pile trestle and approach. Noted Sept. 6.

★N. M., Raton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to G. A. Shaul, Seneca, Kan., $54,195, time, 1 year. Noted Sept. 20.

Cal., Los Angeles—Fill—U. S. Engr. Office, Los Angeles, received low bid making fill involving 120,000 cu.yd. also rip rap protection therefore at San Pedro harbor, from Russell-Green-Foell Co., 2644 Compton Ave., 82c. per cu.yd. alternate bid, $75,000.

★Cal., Mare Island — (Vallejo P. O.) — Magazine Building — Bureau Yards and Docks, Navy Dept., Wash., let contract to Lange & Bergstrom, Sharon Bldg., San Francisco, $74,802.

★Cal., San Francisco—Barracks for Hospital Corps—Bureau Yards and Docks, Navy Dept., Wash., let contract to Schultz Constr. Co., 939 34th Ave., $21,309.

MISCELLANEOUS

Proposed Work

Wharf—Wilmington, Del.—City plans rein.-con., Church St. and Christiana River. About $80,000. E. M. Hoopes, Jr., city engr.

Seawall—Lake Worth, Fla.—City soon lets contract. About $25,000. H. C. Fugate, comr.

Dock—Safety Harbor, Fla.—Town plans to issue $10,000 bonds to build dock.

Piers, etc.—Mobile, Ala.—Gulf Mobile & Northern R.R. plans to build 3 piers and number of warehouses. About $1,000,000. B. V. Wright, Laurel, Miss., ch. engr.

River Terminals — Nashville, Tenn. — River Transportation Com. of Bd. of Transportation Trustees plans to build here. Project includes large warehouse. Bond issue contemplated for work. Plans will be prepared by Capt. Stewart of U. S. Engr. Office.

Transmission Line—Hazard, Ky.—Kentucky River Power Co., plans, from Hazard to Whitesburg, Blackey, Mayking, Sergent, Kona, Craftsville and La Viers, to supply several operating coal companies. R. L. Cornell, Hazard, mgr.

Subway—Ashtabula, O.—City election Nov. 6 to vote on $140,000 bonds to build subway at Center St. Cost, $340,000. New York Central R.R., G. W. Kittredge, ch. engr., Grand Central Terminal, New York City and Pennsylvania Lines West of Pittsburgh, T. Rodd, ch. engr., Pittsburgh, will appropriate 65 per cent. of cost. L. A. Amsden, city engr. Noted May 31.

Icing Dock and Conveyor—Cleveland, O.—Swift & Co., 3240 West 63rd St. plans. About $19,000.

Garbage Incinerator—Norwood—O.—City plans, on Duck Creek Rd.

Garbage Incinerator—St. Clair Heights, Mich.—(Detroit P. O.)—City voted $25,000 bonds to build garbage incinerator. Noted Sept. 27.

Grandstand — Milwaukee (West Allis), Wis.—State Fair Bd. having plans prepared by A. C. Clas, archt., Colby-Abbot Bldg., for 2nd unit of grandstand to be built at State Fair Park. About $[illegible]000. O. E. Remey, secy.

Dam—Stevens Point, Wis.—Jackson Milling Co. plans to build dam across Wisconsin River. About $500,000.

Transmission Line—Dakota, Ia.—Northern Iowa Gas & Electric Co., Humboldt, granted permission by Railroad Com., to build transmission line on certain roads and highways of Humboldt and Wright Cos., Clarion. D. M. Stearns, mgr.

Park Improvements—Minneapolis, Minn.—Park Bd. plans to spend $500,000 to $600,000 to improve parks.

Subway—Parsons, Kan.—City voted $67,000 bonds to build subways under tracks Missouri, Kansas & Texas Ry. on Main St. Railway to appropriate $60,000 toward cost. L. F. Lonnbladh, Dallas, ch. engr. F. W. Frye, city clk. Noted Aug. 16.

Dam—Kearney, Neb.—Central Power Co. plans, near headgates Elm Creek. J. Dowged, Grand Island, ch. engr.

Lake—Ash Grove, Mo.—See "Excavation and Dredging."

Levee Embankment—Poplar Bluff, Mo.—See "Excavation and Dredging."

Transmission System, etc.—Bells, Tex.—Texas Power & Light Co., Dallas, plans to build substation and high-tension transmission system from Bells to Whitewright. F. R. Slater, Dallas, genl. mgr.

Dam—Azusa, Cal.—United Light & Power Co., Los Angeles, plans Eastwood type rein.-con. dam, 200 ft. high, 500 ft. wide at top, 100 ft. wide at bottom, to impound 44,000 acre-feet of water, at mouth of Prairie Fork in Upper San Gabriel Canyon. G. O. Newman, Pacific Electric Bldg., Los Angeles, engr.

Levees, etc.—Blythe, Cal. — (Official) — Palo Verde Protection Dist. election in December to vote on $500,000 bonds to build levees to protect Palo Verde Valley from Colorado River floods involving 33 mi. levee equipped with railroads. Government will be asked to appropriate $500,000 toward cost. J. C. Allison, 735 Van Nuys Bldg., Los Angeles, engr. Noted Aug. 30.

Dam and Tunnel — Redding, Cal. — Dir. Happy Valley Irrigation Dist. plans election to vote on $300,000 bonds to build Missellbach dam and Hoover Creek Tunnel.

Bulkheading, etc. — Richmond, Cal.—See "Excavation and Dredging."

Dam—Annapolis Royal, N. S.—City having plans prepared by Booker & McKechnie, engrs., Davidson Bldg., Halifax, new rein.-con. dam. About $50,000.

Incinerator—Sarnia, Ont.—City receiving bids about Nov. 1. Cost, $25,000. J. S. Crawford, chn. com. Noted Aug. 30.

BIDS DESIRED

Dike—Bernalillo, N. M.—(Official)—Until Oct 17, by N. Montoya, clk., Sandoval Co., building dike, east bank Rio Grande at Ranchos de Albuquerque.

Pier—Manhattan Beach, Cal.—(Official)—Until Oct. 17, by City, building rein.con. pier; L. Price, clk.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Station Finish—Brooklyn, N. Y.—Pub. Ser. Comn., 120 Bway., New York City, let contract station finish for 11 stations on Culver Rapid Transit R.R. to P. J. Carlin Constr. Co., 1123 Bway., New York City, $731,124. Noted Sept. 20.

★Shaft—New York, N. Y.—Pub. Ser. Comn., 120 Bway., let contract building Shaft No. 2, Route No. 26, part of Queensboro Subway Rapid Transit Ry., to I. J. Stander & Co., Inc., 118 East 28th St., $64,149. Noted Sept. 13.

Station Finish—New York, N. Y.—Pub. Ser. Comn., 120 Bway., received low bids station finish for 8th Ave. and 162nd St. connection, Sect. 10-C; also station buildings Anderson and Jerome Aves., (Bronx Boro.), from J. S. Henderson, 30 East 42nd St., $105,880; Snare & Triest, Woolworth Bldg., $134,600.

★Pipe Line Clairton, Pa. — (Official) — Carnegie Steel Co. let contract manufacturing and installation 10-mi. 40-in. diameter lock bar steel pipe to carry gas from by-product coke ovens now being erected at Clairton, to Duquesne and Edgar Thompson steel plants of Carnegie Co., where transported gas will be used for fuel, to T. A. Gillespie, Westinghouse Bldg., Pittsburgh.

Miscellaneous (Continued)

Subway—Phila., Pa. — (Official) — We have been informed that Contrs. Nos. 201 and 203 have been executed by the Keystone State Constr. Co., 704-9 Penn Bldg., totaling $3,289,015. No definite action has been taken on contracts for Smith, Hauser & Mac Isaac, Inc., 18 East 41st St., New York City and Phila. Subway Constr. Co., 712 Lincoln Bldg., or on other contracts that Keystone Constr. Co. was low bidder on. The statement in our issue of Sept. 20 regarding the contracts was an error.

BUILDING THE GOVERNMENT MERCHANT SHIPS.

It is probable that 200 steel ships of uniform design from 5000 to 9000 tons deadweight each will be built for the United States Government by three concerns to whom contract for 50 such vessels was recently let by the United States Shipping Board Emergency Fleet Corporation. The actual number of ships to be built will be decided by the Government within 60 days from date of contract. The steel for the vessels will be fabricated in different mills throughout the country, and shipped to three assembling plants. The Merchants Steamship Corporation will erect 9000-ton ships at a plant at Bristol, Penn. The New York Shipbuilding Corporation (The American International Corporation) will assemble 7000 to 7500-ton boats at Hogg Island, near Philadelphia. The 5000-ton vessels will be assembled at a plant now building on the Newark Meadows, N. J., for the Submarine Boat Co.

As these three concerns will handle their contracts in the same general manner, only one of them need be considered. The Submarine Boat Co. expects to have its Newark shipways ready to operate in November or December of this year. Twenty-eights ships will be assembled at a time, and each batch should be finished in four months.

All pumping equipment is being furnished by the Worthington Co. Motors, dynamos, and electrical apparatus by the Westinghouse Electric & Mfg. Co. The machine tool requirements of the three ship assembling concerns will probably be nominal. The requirements for machine tools to handle these contracts will be restricted almost entirely to such additions as may be necessary in the existing fabricating mills.

WASHINGTON TO SPEND $9,000,000 ON ROADS AND BRIDGES IN 1918.

The annual budgets compiled by the various counties of the state show an enormous sum set aside for highway construction work, which, taken together with the sum of $1,500,000 to be expended by the State Highway Commission on road work next year, shows a probable total of $9,000,000 available next year for road improvements in this state.

The counties reporting to date are as follows:

Snohomish County—Bond issue roads, $750,000; general road and bridge fund, $105,000; three road district funds, $150,000. Total, $1,005,000. A. B. Dean, county engineer, Everett.

Clallam County—General road and bridge fund, $60,000; four road district funds, $88,000. Total, $148,000. A. J. Blackwood, county engineer, Port Angeles.

Clarke County—General road and bridge fund, $60,400; three road districts, $88,700. Total, $149,100. B. L. Dorman, county engineer, Vancouver, Wn.

Lewis County—General road and bridge fund, $84,250; road districts, $174,000. Total, $258,250. J. D. Noville, county engineer, Chehalis, Wn.

Grant County—General, $45,000; 19 road districts, $80,000. Total, $125,000. C. W. Duncan, county engineer, Ephrata.

Franklin County—General, $9000; gravel roads, $44,750; road district fund, $54,400. Total, $108,150. J. W. Ketner, county engineer, Pasco.

Pierce County—General, $300,000; five road districts, $240,000. Total $540,000. D. H. White, county engineer, Tacoma.

Okanogan County — General, $36,500; three road districts, $19,000. Total $55,500. H. E. Smith, engineer, Okanogan.

Benton County—General, $52,000; three road districts, $57,600. Total, $109,600. G. H. Heberling, engineer, Prosser, Wn.

San Juan County—General, $6000; three road districts, $13,650. Total $19,650. E. Ed. Allen, county engineer, Coupeville.

Skagit County—Road and bridge fund, $56,135; three road districts, $105,000. Total, $161,000. W. E. Costello, engineer, Mt. Vernon.

Chelan County—Road district fund, $10,000. F. M. Berry, engineer, Wenatchee.

Whitman County—Road and bridge, $135,000; thirteen road districts, $164,000. Total, $299,000. J. M. McGraw, engineer, Colfax.

Whatcom County—Road and bridge, $100,000. Chas. Lindberry, engineer, Bellingham.

Cowlitz County—Road and bridge, $37,000; six districts, $79,200. Total, $116,200. F. C. Cramer, engineer, Kalama.

Douglas County—General, $46,880; 16 districts, $82,450. Total, $129,330. R. F. Foster, engineer, Waterville.

Pend Oreille County—General, $18,000; three road districts, $34,000. Total, $52,000. H. A. Sewell, engineer, Newport.

Adams County—Road and bridge, $79,500; 16 districts, $56,500. Total, $136,000. O. J. DeSpain, engineer, Ritzville.

Grays Harbor County—General, $95,000; six road districts, $225,535. Total $320,535. J. D. Robertson, engineer, Montesano.

Mason County—General, $23,250; 8 districts, $49,735. Total, $72,985. A. V. Meyer, engineer, Shelton.

Kitsap County—General, $27,850; 6 road districts, $37,170. Total, $65,020. F. B. Gore, engineer, Port Orchard.

King County—General, $350,000; 3 districts, $650,000; bond roads, $400,000. Total, $1,450,000. Sam Humes, engineer, Seattle.

Fifteen counties have yet to be heard from.

SEWAGE DISPOSAL PLANT, STOMFORD, CONN.

Bids were received by City, Sept. 22, for constructing sewage disposal plant, from (A) Frank Palmer, 131 Sound View Ave.; (B) Eaton, Brown & Simpson, Inc. The unit bids were as follows:

	A	B
Protective work and royalties (lump sum)	$26,500.00	$31,268.00
17,000 cu.yd. excavation	1.25	1.32
11,000 cu.yd. rolling embankment	65	29
3,500 cu.yd. concrete	21.25	17.25
200,000 lb. reinforcing steel	06	069
43.5 tons cast iron B. & S. pipe	75.00	103.60
15.5 tons cast iron B. & S. specials	80.00	189.00
5.0 tons cast iron flanged pipe and specials	90.00	262.00
Gate valves (lump sum)	712.00	1,310.00
Sluice gates (lump sum)	2,327.00	791.00
Check valves (lump sum)	229.00	4,179.00
8 6-in. flap valves	17.00	17.875
2 8-in. flap valves	20.00	40.00
1,200 lin.ft. 4-in. vit. pipe	.25	.20
20 lin.ft. 6-in. vit. pipe	.35	.41
450 lin.ft. 8-in. vit. pipe	.75	.50
700 lin.ft. 10-in. vit. pipe	1.25	66
65,000 lb. structural steel	.07	.109
20,000 lb. miscellaneous cast iron, wrought iron and steel	06	185
480 lin.ft. railings	1.25	1.84
Screen chamber superstructure (lump sum)	5,700.00	1,322.00
Laboratory building superstructure (lump sum)	7,325.00	9,882.00
13M. ft.b.m. lumber	50.00	149.50
2,560 sq.yd. baffles, including reinforcement	1.00	3.51
Venturi meter (lump sum)	1,650.00	2,235.00
Chlorinating apparatus (lump sum)	2,175.00	1,557.00
Automatic tide gate (lump sum)	300.00	575.00
Chemical equipment and piping (lump sum)	2,900.00	3,644.00
500 lin.ft. 2-in. water line	1.00	575
2 electric hoists	532.00	583.00
560 lin.ft. railways, steel ties, straight track	1.46	1.46
600 linft. railways, wooden ties, straight track	1.90	1.22
100 lin.ft. railways, wooden ties, curved track	2.00	1.725
9 switches	70.00	75.00
2 tip cars	195.00	204.00
2-in. water line in settling tanks (lump sum)	*1.00	1,119.00
770 cu.yd. crushed stone, sludge beds	2.75	2.59
1,600 sq.yd. macadam	1.00	1.78
Pressure water pump and motor (lump sum)	650.00	632.00
Connecting existing pumps (lump sum)	500.00	287.00
865 lin.ft. fence	1.25	.52
Extended totals	$192,857	$199,699

* Item 36 of Palmer bid was given as $1.00. Explained as meaning $1.00 per lin.ft. of pipe.

DAM, SAN DIEGO, CAL.

Bids were received by City, Sept. 4, for constructing lower Otay Dam, spillway and outlet tower, from (A) Wurster Constr. Co., 654 Spreckles Bldg., (B) H. G. Fenton, 204 Owl Bldg.; (C) James Kennedy, 901 Washington Bldg., Los Angeles; (D) R. P. Shields, Amer. Natl. Bank Bldg., $612,762; (E) Twohy Bros. Co., 677 Spreckles Bldg., Los Angeles, $691,650. The unit bids of the three lowest bidders were as follows:

Schedule 1	A	B	C
12,000 cu.yd. excavation, Class 1	$0.62	$1.75	$1.13
7,500 cu.yd. excavation, Class 2	1.632	2.75	2.48
1,500 cu.yd. excavation, Class 3	53	1.75	1.13
9,000 cu.yd. excavation, Class 4	1.283	2.25	2.48
500 cu.yd. backfill	2.026	50	1.50
24,000 cu.yd. concrete	4.973	3.75	4.87
70,000 cu.yd. concrete cyclopean masonry	3.071	3.37	4.87
325 cu.yd. concrete reinforced	7.052	4.00	4.87
30,000 lb. placing reinf. steel	0141	0113	02
10,000 cu.yd. crushing rock for sand	1.08	1.00	2.00
500 lin.ft. drilling holes, core recovering	3.484	3.00	5.25
1,000 lin.ft. drilling holes—percussion	2.088	4.00	5.25
200 cu.yd. grouting under pressure	9.07	5.00	12.00
2,000 lin.ft. laying drain tile and pipe	.275	20	.15
10,000 lb. placing metal work	.0345	.05	.0375
Schedule 2			
1,000 cu.yd. excavation, Class 3	.54	1.00	1.13
5,250 cu.yd. excavation, Class 4	1.50	2.25	2.48
500 cu.yd. backfill	1.18	1.00	1.50
600 cu.yd. concrete	4.97	4.00	4.82
200 cu.yd. concrete cyclopean masonry	3.50	3.50	4.82
1,200 cu.yd. concrete reinforced	5.40	4.50	4.82
30,000 lb. placing reinf. steel	.02	.0117	.02
Schedule 3			
100 cu.yd. excavation, Class 3	53	1.00	1.13
200 cu.yd. excavation, Class 4	1.40	2.25	2.48
300 cu.yd. backfill	1.00	.50	1.50
270 cu.yd. concrete tunnel lining	25.57	14.00	15.00
450 cu.yd. concrete reinforced	9.711	15.00	15.00
20,000 lb. placing reinf. steel	0125	.01125	.02
40,000 lb. placing metal work	.02	.05	.0375

	A	B*	C
Extended totals, Schedule 1	$387,410	....	$547,838
Extended totals, Schedule 2	$19,767	....	$25,140
Extended totals, Schedule 3	$12,957	....	$13,759
Extended grand totals	$420,135	$450,000	$586,737

* Contractor's estimated cost, exclusive of overhead expense and profit, which is provided for in the contractor's proposal by a varying percentage based on final cost of work.

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until October 9, 1917.

Barge Canal Improvements

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF PUBLIC WORKS.
Albany, N. Y.,
September 7th, 1917.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, October 9th, 1917, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

1

CONTRACT NO. 83.

Erie Canal—Sections 10 and 11.

For completing the canal at Tonawanda and removing a guard-lock and coffer-dam near Sulphur Springs.

Sheets 1 to 6 inclusive.

2

CONTRACT NO. 163.

Erie Canal—Sections 9 and 10.

For raising Spier's Road bridge, completing crests of spillways and other work between Rochester and Lockport.

Sheets 1 to 5 inclusive.

3

CONTRACT NO. 164.

Erie Canal—Section 8.

For completing the construction of the canal at certain locations between Lyons and Newark and for constructing a retaining dam at Macedon.

Sheets 1 to 9 inclusive.

And for the construction of barge canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

4

TERMINAL CONTRACT NO. 15-M.

Electrical equipment and machinery for operating and lighting the Utica Terminal lock.

Contract plans, sheets 1-11, inclusive.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans of drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company in the case of terminal contract) in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

Official Proposals

Price, $3.60 an inch—Copy can be received until Tuesday, 10 a.m., for issue mailed the next day.

PROPOSALS

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposals shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., Sept. 19, 1917. Sealed proposals will be opened in this office at 3 p.m., Oct. 31, 1917, for the construction of the United States post office at Hollidaysburg, Pa. Drawings and specifications may be obtained from the custodian of the site at Hollidaysburg, Pa., or at this office in the discretion of the Supervising Architect. JAS. A. WETMORE, Acting Supervising Architect.

PROPOSALS

Bids received until October 17, 1917.

Steel Bridge

Harrisburg, Pa.

Pennsylvania Public Service Commission, Harrisburg, Pa.—Sealed proposals will be received at said office until 10 a. m., October 17, 1917, when bids will be publicly opened and scheduled, and contract awarded as soon thereafter as possible, for the construction of a steel bridge, with concrete abutments and concrete pedestals for steel supports, situated on Main Street, Butler Borough, Butler County, over the Conoquenessing Creek and the tracks of the B. & L. E. R. R. and B. & O. R. R. The main span will be 125 feet with 5 approach spans on the north and 6 on the south, making a total length of 687 feet. The roadway to be 28 feet wide and two sidewalks each 5 feet wide. Bidders may secure proper blanks upon personal application or written request to the Public Service Commission, Harrisburg, Pa., and plans may be seen there and if desired may be obtained upon payment of two dollars per set. No refund for plans returned. Plans may also be seen in the office of the State Highway Department, Harrisburg, Pa., 904 Hartje Building, Pittsburgh, Pa., 1001 Chestnut Street, Philadelphia, Pa., and Franklin Trust Co. Bldg., Franklin, Pa.

Bids received until October 23, 1917.

Reinforced Concrete Viaduct

Fort Dodge, Iowa.

Sealed proposals will be received until 9:30 o'clock a.m., October 23, 1917, for the construction of a reinforced concrete viaduct on North Third Street in the City of Fort Dodge, Iowa, in accordance with plans and specifications which may be obtained from the City Engineer upon deposit of $20. Estimated quantities, 190 tons steel, 5720 cu.yd. concrete. Certified check, $10,000.

W. L. TANG,
City Clerk.

Bids received until October 17, 1917.

Concrete Pier Construction

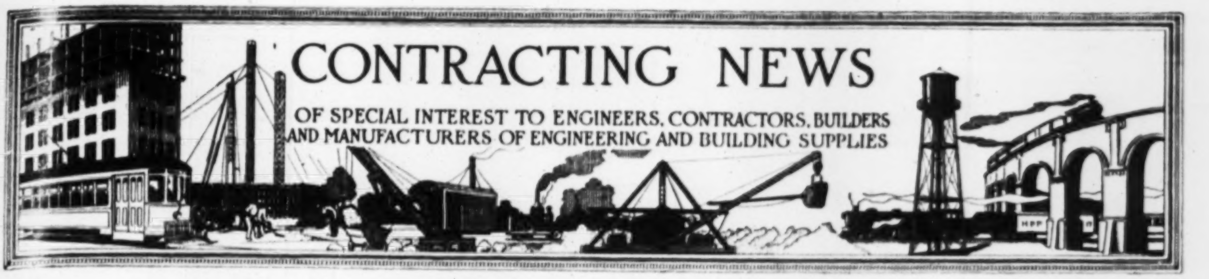
Manhattan Beach, Calif.

Sealed proposals will be received at this office until 7:30 P. M., October 17, 1917, for constructing an all reinforced concrete municipal pier, on concrete piles, about 1250 feet long, and containing about 2000 cubic yards. Information on application to the City Clerk, Manhattan Beach, California.

LLEWELLYN PRICE,
City Clerk.

SEALED PROPOSALS will be opened by the Lighthouse Inspector, 341 P. O. Bldg., Detroit, Mich., at 2 o'clock p. m., on dates indicated herein, for furnishing construction materials for Sand Hills Light Station as follows: Cast iron stairs and lantern deck, Nov. 1, 1917. Structural steelwork, approximately 20 tons, Nov. 1, 1917. Cast iron lantern, Nov. 1, 1917. Cut stone work, approximately 750 cu. ft., Oct. 15, 1917. Face brick, about 85 M, and common brick, about 150 M, Oct. 15, 1917. Separate proposals will be receied for each item. Information upon application to the above office.

U. S. ENGINEER OFFICE, Louisville, Ky.—Sealed proposals for constructing Power House at Lock No. 41, Ohio River, will be received here until 12 noon, central time, October 31, 1917, and then opened. Information on application.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 51 to 56 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Oct. 16.	Caldwell, Kan.	Oct. 4
Oct. 16.	Lockney, Tex.	Oct. 11
Oct. 19.	Akron, O.	Oct. 4
Oct. 16.	Berwyn, Ill. Adv. Oct. 11.	Oct. 11
Oct. 22.	Salem, N. J. Adv. Oct. 11.	Oct. 11
Oct. 29.	Portland, Ore.	Oct. 11

SEWERS

Bids Close		See Eng. News-Record
Oct. 14.	Pleasantville, N. J.	Sept. 27
Oct. 16.	Wabash, Minn.	Sept. 27
Oct. 16.	Bayonne, N. J.	Oct. 11
Oct. 16.	Berwyn, Ill. Adv. Oct. 11.	Oct. 11
Oct. 16.	Toronto, Ont.	Oct. 11
Oct. 16.	Wellsburg, W. Va.	Oct. 11
Oct. 17.	Brooklyn, N. Y.	Oct. 11
Oct. 17.	Grosse Point, Ill. Adv. Oct. 4.	Oct. 4
Oct. 18.	Santa Barbara, Cal.	Oct. 4
Oct. 18.	Pocatello, Idaho	Oct. 11
Oct. 18.	Baxter Springs, Kan.	Oct. 11
Oct. 25.	St. Joseph, Mich. Adv. Oct. 4.	Oct. 4

BRIDGES

Bids Close		See Eng. News-Record
Oct. 15.	Tallahassee, Fla.	Oct. 4
Oct. 15.	California	Oct. 4
Oct. 15.	Ames, Ia.	Oct. 11
Oct. 16.	Tampa, Fla.	Oct. 4
Oct. 16.	Glenville, W. Va.	Sept. 27
Oct. 16.	West Palm Beach, Fla.	Oct. 11
Oct. 16.	Baltimore, Md. Adv. Oct. 11.	Oct. 11
Oct. 17.	Butler, Pa. Adv. Oct. 4.	Oct. 4
Oct. 20.	Pennsylvania	Sept. 20
Oct. 20.	Charleston, W. Va.	Sept. 27
Oct. 20.	Big Chimney, W. Va.	Oct. 11
Oct. 23.	Fort Dodge, Ia. Adv. Sept. 27 and Oct. 4.	Sept. 27
Nov. 6.	Dallas, Tex. Adv. Oct. 11.	Oct. 11

STREETS AND ROADS

Bids Close		See Eng. News-Record
Oct. 13.	Wayne, W. Va.	Oct. 11
Oct. 15.	Newark, N. J.	Sept. 13
Oct. 15.	East St. Louis, Ill.	Oct. 11
Oct. 16.	Cape May N. J.	Sept. 6
Oct. 16.	Pennsylvania	Sept. 20
Oct. 16.	Billings, Mont.	Oct. 4
Oct. 16.	Johnson, Tenn.	Oct. 4
Oct. 16.	Berwyn, Ill. Adv. Oct. 11.	Oct. 11
Oct. 16.	South Orange, N. J.	Oct. 11
Oct. 17.	San Diego, Cal.	Oct. 11
Oct. 17.	Cornwall, Ont.	Oct. 11
Oct. 18.	Jersey City, N. J.	Oct. 11
Oct. 20.	Bonners Ferry, Idaho	Oct. 11
Oct. 20.	Bryan, O.	Oct. 11
Oct. 22.	Clarendon, Ark.	Oct. 4
Oct. 22.	Conway, Ark.	Oct. 11
Oct. 22.	Washington	Oct. 11
Oct. 22.	Ephrata, Wash.	Oct. 11
Oct. 23.	Jersey City, N. J.	Oct. 11
Oct. 24.	Paterson, N. J.	Sept. 27
Oct. 24.	Santa Barbara, Cal.	Oct. 4
Oct. 26.	Indiana	Oct. 11
Oct. 27.	Indiana	Oct. 11
Oct. 29.	Indiana	Oct. 11
Nov. 5.	Pikeville, Ky.	Sept. 27
Nov. 6.	Indiana	Oct. 11
Nov. 6.	Morgantown, W. Va. Adv. Oct. 11.	Oct. 11

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Oct 13.	Sioux Falls, S. D.	Oct. 11
Oct. 15.	Willmar, Minn.	Sept. 13
Oct. 15.	Havana, Ill.	Oct. 4
Oct. 16.	St. Peter, Minn.	Oct. 4
Oct. 19.	Mankato, Minn.	Oct. 4
Oct. 20.	Waterford, Cal.	Sept. 27
Oct. 22.	Elbow Lake, Minn.	Oct. 4
Oct. 22.	Rockport, Ind.	Oct. 4
Oct. 23.	Athens, Ga.	Oct. 11
Oct. 24.	Lesueur Center, Minn.	Oct. 4
Nov. 2.	Albany, N. Y. Adv. Oct. 11.	Oct. 11
Nov. 2.	Sibley, Ia.	Oct. 11
Nov. 9.	St. Cloud, Minn.	Sept. 27

BUILDINGS

Bids Close		See Eng. News-Record
Oct. 15.	New York, N. Y.	Sept. 27
Oct. 15.	Beaumont, Tex.	Oct. 4
Oct. 17.	Wichita, Kan.	Oct. 4
Oct. 18.	Red Bank, N. J.	Oct. 4
Oct. 20.	Oxford, O.	Sept. 27
Oct. 23.	Ft. Wayne, Ind.	Oct. 4
Oct. 23.	Smith Center, Kan.	Oct. 4
Oct. 23.	New York, N. Y.	Oct. 11
Oct. 24.	Abilene, Kan.	Oct. 4
Nov. 25.	Middletown, Mass.	Oct. 4
Oct. 28.	Healdsburg, Cal.	Oct. 11
Oct. 28.	Denver, Colo.	Oct. 11
Dec. 1.	Norfolk, Va.	Sept. 13

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Oct. 15.	Wharf and Trestle — Charleston, S. C.	Oct. 11
Oct. 15.	Laboratory—Indiana Head, Md.	Oct. 11
Oct. 15.	Garbage Incinerator—Mare Island, Vallejo, P. O., Cal.	Oct. 11
Oct. 15.	Piers and Quarry Walls —New London, Conn.	Oct. 11
Oct. 15.	Hospital—Chelsea, Mass.	Oct. 11
Oct. 15.	Shore Bulkheads — Hoboken, N. J.	Oct. 11
Oct. 15.	Radio Towers—El Cayey, P. R.	Oct. 11
Oct. 15.	Building—Tiburon, Cal.	Oct. 11
Oct. 15.	Movable Crest, Service Bridge, Hoist Cars — Denver, Colo. Adv. Sept. 13.	Sept. 13
Oct. 15.	Post Office — Waynesboro, Va.	Sept. 13
Oct. 15.	Laterals—El Paso, Tex. Adv. Sept. 20.	Sept. 20
Oct. 15.	Foundry, etc. — Philadelphia, Pa.	Sept. 27
Oct. 15.	Excavators—Denver, Colo.	Sept. 27
Oct. 15.	Mine Storage Bldg. — Ft. Mifflin, Pa.	Oct. 4
Oct. 15.	Construction Materials — Detroit, Mich. Adv. Oct. 4.	Oct. 4
Oct. 20.	Experimental Sheet Rolling Mill — Washington, D. C.	Oct. 11
Oct. 20.	Tank and Towers — Key West, Fla.	Oct. 11
Oct. 22.	Power House and Machine Shop — New London, Conn.	Oct. 11
Oct. 22.	Heating System—Philadelphia, Pa.	Oct. 11
Oct. 23.	Post Office — Andalusia, Ala.	Sept. 20
Oct. 24.	Post Office — Bakersfield, Cal. Adv. Sept. 20 and 27.	Sept. 20
Oct. 26.	Post Office — Mt. Carmel, Ill.	Sept. 20
Oct. 28.	Post Office — Waterloo, N. Y.	Sept. 20
Oct. 29.	Buildings—El Cayey, P. R.	Oct. 11
Oct. 29.	Buildings—Grand Isle, La. Adv. Oct. 11.	Oct. 11
Oct. 30.	Metal Work, etc. — Key West, Fla. Adv. Sept. 6 and 13.	Sept. 6
Oct. 30.	Post Office—Farmville, Va.	Sept. 27
Oct. 31.	Power House — Brooklyn, N. Y.	Oct. 4
Oct. 31.	Post Office—Hollidaysburg, Pa. Adv. Oct. 4.	Oct. 4
Nov. 1.	Lookout—Omaha, Neb. Adv. Oct. 11.	Oct. 11
Nov. 1.	Post Office—Kenton, O.	Sept. 27
Nov. 1.	Construction Materials — Detroit, Mich. Adv. Oct. 4.	Oct. 4
Nov. 2.	Maneuver Boats and Post Office—Cincinnati, O. Adv. Oct. 4.	Oct. 4
Nov. 2.	Post Office — Valparaiso, Ind.	Oct. 4
Nov. 5.	Post Office — Burlington, N. C.	Oct. 4
Nov. 8.	Piers, etc.—Detroit, Mich. Adv. Oct. 11.	Oct. 11
Nov. 9.	Post Office—Forsyth, Ga.	Oct. 11
Nov. 13.	Post Office—Harrisonville, Mo.	Oct. 11
Nov. 14.	Post Office—Austin, Tex.	Oct. 11
Nov. 28.	Post Office — Bellefourche, S. D.	Oct. 11

MISCELLANEOUS

Bids Close		See Eng. News-Record
Oct. 17.	Elimination Grade Crossing—Philadelphia, Pa.	Oct. 11
Oct. 17.	Dike—Bernalillo, N. M.	Oct. 4
Oct. 17.	Pier—Manhattan Beach, Cal. Adv. Oct. 4 and 11.	Oct. 4
Oct. 23.	Pier—New York, N. Y. Adv. Sept. 27 to Oct. 11.	Sept. 27
Nov. 15.	Flood Control—Dayton, O. Adv. Sept. 13 to 27.	Sept. 13

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. J., Ventnor—City plans to build reservoir. About $25,000. Address I. B. Sweigart.

Water-Works (Continued)

N. J., Wharton—Boro. election in November to vote on $110,000 bond issue to install water-works system.

Pa., Bristol—See "Sewers."

Va., Riverside—City plans water-works system in North Riverside and Riverside Park. About $40,000.

Ga., Murray—City issued $20,000 bonds to install water-works and electric-light and power plant.

Miss., Charleston—City having plans prepared by X. A. Kramer, engr., Magnolia, for water-works system. About $13,500 available for work. Noted Sept. 13.

O., Cincinnati—See "Streets and Roads."

O., Cleveland—City rejected bids dismantling and re-erecting building 30,000,000-gal. De Laval centrifugal pump, auxiliaries, etc., and building structural steel platform around same, at Division Ave. pumping station, as they were too high. Noted Aug. 23.

O., Columbus—City plans to issue $10,000 bonds to improve and enlarge water mains. H. Maetzel, city engr.

O., East Youngstown—Town to sell $45,000 bonds Oct. 22 to build water-works system. Noted June 7.

O., Greenville—(Official)—City will not improve water-works this year as no bids were received for sale of $60,000 bonds. Noted Sept. 13.

Mich., Lakeview — City voted $11,500 bonds to build water-works system. L. R. Stebbins, supt.

Wis., Tomahawk — (Official) — City rejected bids to build and equip pumping station and install water mains. Noted Sept. 13.

Ia., Lohrville—(Official)—City defeated $10,000 bond election for water-works system. Noted Sept. 27.

Kan., Attica—City having plans prepared by W. B. Rollins & Co., engrs., 209 Ry. Ex. Bldg., Kansas City, Mo., for water-works system. About $12,000.

Kan., Liberal—City to issue $26,000 bonds to improve water-works system; plans include 1 well and pump, 1 concrete surface reservoir, 1 centrifugal pump for fire system, and extending and repairing distributing systems. J. Karau, clk.

Kan., McCracken—City election Oct. 23 to vote on $12,000 bond issue to build water-works system. L. L. Ryan, clk.

Mo., Galena—City having plans prepared by Burns & McDonnell, engrs., 400 Inter-State Bldg., Kansas City, for water-works system; $100,000 bonds recently voted for project. Noted Sept. 20.

Mo., Joplin—City voted $100,000 bonds to build water-works system. J. J. McAfee, city engr. Noted Sept. 27.

Mo., Kansas City—City plans to improve Turkey Creek pumping station. C. Hill, city engr.

Okla., Guthrie—City voted $32,000 bonds to extend water-works and sewerage systems. Noted Sept. 13.

Okla., Hartshorne—City election soon to vote on $17,500 bond issue to build filtration plant.

Okla., Henryetta—City election Oct. 25 to vote on $128,000 bond issue to extend water-works system. H. M. La Wue, supt.

Okla., McAlester—(Official)—City having plans prepared for water-works system. A. H. Kendrick, city engr. Noted Sept. 27.

Okla., Ponca City—City election soon to vote on $20 000 bond issue for water-works and sewerage systems. G. G. O'Neill, supt.

Okla., Shawnee—City plans to improve water-works. E. L. Moore, city engr.

Okla., Wapanucka—City voted $14,000 bonds to build water-works system. Noted Oct. 4.

Wash., Bremerton — City voted $80,000 bonds to extend and improve water-works system. Noted Aug. 30.

Cal., Oakdale—Sierra & San Francisco Power Co. plans to construct reservoirs, ditches and storage dams. About $5,000,000. H. F. Jackson, genl. mgr.

Cal., Santa Barbara—City sold $90,000 bonds to improve water-works system. A. B. Cook, city engr.

BIDS DESIRED

N. J., Salem—(Official)—Until Oct. 22, by W. R. Dunn, recdr., for installing 1,500,000 gal. electrically driven centrifugal pump; advertised in this issue.

Ill., Berwyn—(Official)—Until Oct. 16 by J. M. Humiston, secy. bd. local impvts., for water-supply pipes, lead water-service pipes, etc., in Wenonah, Clinton, Home, Harvey, Lombard, Wisconsin and Elliott Aves., advertised in this issue.

Tex., Lockney—(Official)—Until Oct. 16, by City, for water-works system, including 9200 ft. 6-, 8-in. c.i. pipe, 2½ tons specials, 75,000 gal. tank and tower, etc. H. E. Elrod, Interurban Bldg., Dallas, engr. Noted Oct. 4.

Ore., Portland—Until Oct. 29, by City, for 2 multi-stage turbine pumps, 1,000,000-gal. capacity, and other pumping equipment for water-works. D. Kellaher, purch. agt. P. H. Dater, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contract laying water pipes, Commercial Causeway and Washington St., to J. T. Shea, Jr., 696 East 6th St., $13,302.

★Conn., Morris—City of Waterbury let contract completing diversion tunnel at Wigwam Creek reservoir here to Gray & Ireland, 17 Battery Pl., New York City, $41,000.

★Minn., Remer—City let contract water-works system to Badger Constr. Co., 2844 Irving Ave., S, Minneapolis, $17,800. Noted May 31.

★S. D., McLaughlin — City let contract water-works system to Badger Constr. Co., 2844 Irving Ave., S., Minneapolis, Minn., $25,999.

Cal., Santa Barbara—City received low bid building storage reservoir back of Mission Hill, invoiving 33,980 cu.yd. excav. and fill on main dam; 5068 cu.yd. excav. and fill in embankment; 16,000 lin.ft. outlet pipe line; inlet and outlet appurtenances, etc., from A. L. Pendola, 1332 Garden St. Noted Aug. 2.

SEWERS

Proposed Work

N. Y., Buffalo—City plans trunk sewers in various districts. About $400,000. G. H. Norton, city engr.

N. Y., Rochester—See "Streets and Roads."

N. J., Newark—(Official)—City rejected bids sewer in Sandford Ave., 500 ft. 30-in. concrete pipe sewer, 240 ft. vitr. salt glazed pipe sewer, 12 catch basins and 5 manholes. Noted Sept. 20.

N. J., Passaic—City plans extending sanitary sewers and building storm water sewers in 1st Ward Park (Dundee Island), also sanitary sewers in Federal St. C. P. Wise, city engr.

Pa., Bristol—City plans to build additions to sewerage system; also enlarge water-works, including pumping plant. W. H. Boardman, city engr.

Pa., Scranton—Council passed ordinance to build sewerage system in 21st Ward. W. Schunk, city engr.

Va., Riverside—City plans sanitary sewerage system, main sewer to be 2 mi. long, in North Riverside and Riverside Park. About $15,000.

W. Va., Princeton—City plans election to vote on $50,000 bond issue to extend sewerage system.

Tenn., Nashville—(Official)—City voted $1,000,000 bonds to build sewerage system. Noted Aug. 16.

O., Rocky River—Village soon lets contract sewage disposal plant and sewers. E. H. Arnold, village engr.

Ia., Waterloo—City soon lets contract for extension to sewer through Lincoln Park addition. C. A. Roby, city engr.

Minn., Kinney—Village plans election to vote on $20,000 bond issue to build sewers. R. McNair, village engr.

Minn., St. Paul — City plans to install sewer in portion Ocean St. About $27,74. O. Claussen, city engr.

Minn., St. Paul—(Official)—City rejected bids for storm water sewer on Fairview, Summit, Macalester and Pascal Aves. Noted Oct. 11.

Mo., Clayton—St. Louis Co. plans to build sewerage system to extend from eastern edge of Kirkwood to Lindenwood, 5 mi. long. About $1,000,000.

Okla., Henryetta—City election Oct. 25th to vote on $32,000 bond issue for storm-water sewers. W. H. Sullins, city clk.

Okla., Ponca City—See "Water-Works."

Wash., Lind—City had plans prepared by Sawyer Bros., engrs., White Bldg., Seattle, sewerage system, including 21,300 ft. 6- 12-in. pipe. About $30,000.

Ont., Colchester South—City plans to construct storm drains. About $10,000. J. H. Madill, clk.

Ont., London—City lets contract about Oct. 20 for new vitr. tile sewers. About $25,000. H. Brazier, city engr.

B. C., Esquimalt—City had plans prepared by E. F. Bourne, engr., for surface drain from Skinner's flats to sea, including 30-36-in. pipe.

BIDS DESIRED

N. Y., Brooklyn—Until Oct. 17, by L. H. Pounds, boro. pres., building sewers and sewage-pumping station in Flatlands Ave.

N. J., Bayonne—Until Oct. 16, by City, building sewers and appurtenances in portions East 23rd and East 24th Sts. W. L. Clarkson, city engr.

W. Va., Wellsburg—Until Oct. 16, by Street Comn., for lateral sewers in 3rd and 4th wards. M. E. Boyd, city engr. Noted May 3.

Ill., Berwyn—(Official)—Until Oct. 16 by J. M. Humiston, secy. bd. local impvts., for vitr. tile pipe sewers, etc., in Home, Wenonah, Clinton, Harvey and Wisconsin Aves. and West 27th St.; advertised in this issue.

Ia., Ames—Until Oct. 15, by City, for storm sewers, including about 7300 ft. 10- to 15-in. pipe, 13 manholes and 47 catch basins. A. B. Maxwell, city clk.

Kan., Baxter Springs—(Official)—Until Oct. 18, by O. M. Spratt, city clk., for sewerage system, including 82,618 ft. 8- 15-in. vitr. sewer pipe, 302 8- 16-in. c.-i. pipe, together with manholes, etc. A. C. Moore, Frisco Bldg., Joplin, Mo., engr. Noted July 26.

Idaho, Pocatello—Until Oct. 18, by A. R. Dawson, city clk., for 10,000 ft. 9-in. sewers in Dist. No. 12. About $25,290. J. H. Giles, city engr. Noted July 12.

Ont., Toronto—Until Oct. 16, by T. L. Church, chn. bd. control, building Moore Park sewer drainage system. Eastern and Western sections, outlet via Glen Rd., from Park Dr. to Summerhill Ave.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Thiells—F. A. Vanderlip, pres. bd. mgrs., Letchworth Village, received low bid sanitary underground sewer, Attendants' Home and Service Bldg., from R. T. Ford Co., 206 South Ave., Rochester, $29,484.

N. J., Trenton—City received low bid 927 ft. 60-in. concrete sewer and 3 15-in. slants, 80 ft. 15-in. pipe, 4 concrete inlets and 2 manholes and 1 concrete portal wall, from De Lucia & Gibbs, South Clinton Ave., $14,224.

★Pa., Scranton—City let contract, 800 lin.ft. 36-in. brick sewer and 21,050 lin.ft. 30-in. vitr. pipe sewer to M. Stipp & Sons, 435 Moir St.

★W. Va., Huntington — (Official) — City let contract sewers portions Richmond St. to J. Ullom, Huntington, $23,496. Noted Sept. 27.

★N. C., Durham — (Official) — City let contract sewerage system to Blankenship & McClelland, Charlotte, $10,442.

★O., Cleveland—City let contract Sect. No. 4 south intercepting sewer to Connelly Constr. Co., 437 Arcade, $163,325. Noted Aug. 16.

Sewers (Continued)

★**O., Cleveland**—(Warrensville P. O.)—Village let contract Sects. Nos. 1 and 2 of Taylor-Caledonia Sewer Dist. No. 5, to George Bros,. 1148 Boliver Rd., $29,107, and $44,728 respectively; Sect. No. 3, to Curro Bros., 1977 East 126th St., $46,687. Both contractors of Cleveland. Noted Aug. 30.

★**O., Youngston**—City let contract sewer in Albert St. to C. Harris. About $75,000. Noted June 28.

Mich., Detroit — City received low bid for Sects. Nos. 1, 2 and 3, Lynch Rd. sewer, from J. A. Mercier, 216 Hammond Bldg., $1,095,720. Noted Sept. 13.

Minn., St. Paul—City received low bid storm sewer in Fairview St. from O'Neill & Preston, 60 East 6th St., $87,400. Noted Sept. 20.

★**Neb., Oakland**—(Official)—City let contract sewerage system to Katz Constr. Co., 638 Brandeis Bldg., Omaha, $31,118. Noted Sept. 13.

★**Tex., Nacogoches** — City let contract sewerage system and disposal plant to Winslett Eldridge Co., 1001 Main St., Dallas, $40,000. Noted Sept. 27.

BRIDGES

Proposed Work

Mass., Braintree — Town having plans prepared by H. L. White, engr., Farquhar St., for bridge over Monatiquo River. About $100,000.

N. J., Mount Holly—Bd. Freeholders Burlington Co. plan to rebuild and strengthen bridges leading to Camp Dix, Wrightstown. About $10,000. J. Logan, co. engr.

N. J., Newark—See "Buildings."

Pa., Du Bois — (Official) — City rejected bids building bridge over Sandy Lick Creek, on Brady St. About $15,000. G. A. Flink, 301-3 Commonwealth Trust Bldg., Harrisburg, engr. Noted Sept. 6.

Pa., Mauch Chunk—Carbon Co. plans to build new bridge over Aquashicola Creek, at Little Gap.

Pa., Pottstown—Montgomery Co., Norristown, and Chester Co., West Chester, plans to repair Hanover St. bridge over Schuylkill River. About $32,000.

O., Akron — (Official) — Summit Co. received no bids for North Hill viaduct, rein.-con., 2790 ft. long. M. Rebel, clk. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., engrs. Noted Sept. 13.

Wis., Clintonville—City soon lets contract building 60-ft. rein.-con. bridge, 34-ft. roadway, over Pidgeon River. About $10,000. J. Spearbraker, clk.

Neb., Westpoint—Cuming Co. receiving bids about Oct. 20 for 240-ft. bridge over Elk Horn River. G. E. Johnson, Lincoln, state bridge engr.

Que., Shawenegan Falls—Council soon lets contract for rein.-con. bridge between Shawenegan Falls and Ste. Flore. R. Rinfret, city engr.

Sask., Ft. Qu'Apelle—Provincial Government. plans to build rein.-con. bridge over river joining Echo and Katepwe Lakes, here.

BIDS DESIRED

Md., Baltimore—Until Oct. 16, by State Rds. Comn., 601 Garrett Bldg., rebuilding 1 slab bridge on State Rd. near Bacon Hill, Cecil Co. F. H. Zouck, chn.; advertised in this issue.

W. Va., Big Chimney—Until Oct. 20, by Comrs. Kanawha Co., Charleston, building steel highway bridge over Elk River, near Big Chimney. F. D. Burdette, Charleston, co. rd. engr.

Fla., West Palm Beach—(Official)—Until Oct. 16, (extension of date) by Palm Beach Co. Comrs. building 2 60-ft. Scherzer rolling lift steel bridges over F. E. C. Canal at Delfray and Boynton. R. F. Goodman, co. engr. Noted Sept. 20.

Ill., East St. Louis — See "Streets and Roads."

Tex., Dallas—(Official)—Until Nov. 6, by Dallas Southwestern Traction Co., building steel bridge, concrete approaches; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Thiells—F. A. Vanderlip, pres. bd. mgrs., Letchworth Village, received low bid building bridge over creek from P. Keeler Bldg. Co., Loudonville St., Albany, $13,797.

★**Va., Richmond**—State Highway Comn. let contract building new 80-ft. steel bridge over south fork Roanoke River, Montgomery Co., to Roanoke Iron & Bridge Co., Roanoke.

★**Ga., Woodbine**—(Official)—Camden Co. Comrs., St. Marys, let contract building steel bridge over Satilla River to Austin Bros., Greenwood Ave., Atlanta, $17,800. with substitute of Scherzer rolling lift bridge for trunnion bridge. Noted Sept. 20.

★**Fla., Bradentown** — City let contract building bridge over Manatee River, between Bradentown and Palmetto, to E. W. Parker, 402 Curry Bldg., Tampa, $57,000. Noted Aug. 16.

★**O., Columbus**—Bd. Comrs. Franklin Co. let contract building bridge over Scioto River, to Hickey & Co., Ry. Ex. Bldg., St. Louis, Mo., $584,905.

★**Kan., Mankato** — (Official)—Jewell Co. let contract building 19 bridges to Central Bridge Co., Mankato, $15,985. Noted Sept. 20.

★**N. M., Las Vegas**—San Miguel Co. let contract building 4 bridges to Missouri Valley Bridge Co., Sante Fe, N. M., $56,353.

Cal., Los Angeles—Los Angeles Co. received low bid building bridge over San Gabriel River, Anaheim-Telegraph Rd., and timber bridge over Rio Hondo Valley Blvd., from W. Ledbetter, 651 Pacific-Electric Bldg., $49,942 and $44,937 respectively. Noted Sept. 13.

★**Cal., Stockton** — See "Excavation and Dredging."

STRUCTURAL STEEL WORK

Proposed Work

N. J., Newark—See "Buildings."

BIDS DESIRED

W. Va., Big Chimney—See "Bridges."

Fla., West Palm Beach—See "Bridges."

Tex., Dallas—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston**—See "Industrial Works."

★**Va., Richmond**—See "Bridges."

★**Ga., Woodbine**—See "Bridges."

REINFORCED CONCRETE

Proposed Work

Conn., Middletown—See "Industrial Works."

Wash., D. C.—See "Federal Government."

O., Akron—See "Bridges."

Mich., Detroit—See "Buildings."

Wis., Clintonville—See "Bridges."

Que., Shawenegan Falls—See "Bridges."

Sask., Ft. Qu'Apelle—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Buffalo**—See "Industrial Works."

★**Ky., Louisville**—See "Industrial Works."

STREETS AND ROADS

Proposed Work

N. Y., Buffalo—City Council plans to pave Breckenridge St., sandstone on concrete base. G. H. Norton, city mgr.

N. Y., Rochester—City plans to pave Ringle St. and Arnett Blvd.; also grade, build sidewalks, and install sewers in Grand Ave.; about $64,200 and $28,000 respectively. F. T. Elwood, city engr.

N. J., Jersey City—City Comrs. plan to improve Stevens Ave. About $20,000. C. A. Van Kuren, city engr.

N. J., North Bergen—(Weehawken P. O.)—Town plans to repave and improve Courtlandt St., from Hudson Co. Blvd. to Grand Ave. About $15,000.

N. J., West Orange—Council plans paving portion Valley Rd., grouted granite block on concrete. About $60,000. C. Winston, city engr.

Pa., New Brighton—Boro. plans to grade, curb and pave portions 4th and 6th Aves., and 12th St. H. T. Barber, city engr.

Pa., Paxtang—Boro. Council plans to pave Derry St. Pike with State aid.

Va., New Kent—New Kent Co. Comrs. plan $50,000 bond issue to improve automobile highway provided Federal Government will appropriate like amount.

Va., Petersburg — City and Prince George Co., Prince George, plans widening concrete road between Petersburg and Camp Lee County to appropriate $20,000 toward cost and city $10,000.

W. Va., Elm Grove—City voted $51,000 bond issue to pave all streets.

S. C., Columbia — City plans to issue $320,000 bonds for street improvements, parks, city market and abbatoir. L. A. Griffith, mayor.

Ga., Atlanta—Fulton Co. Comrs. plan to resurface Peachtree Rd. from city limits to Bulkhead, 2½ mi., asphaltic concrete. About $75,000.

Florida—State Highway Comn., Tallahassee, having surveys made for completing paving of National Highway through Hamilton and Columbia Cos.

Fla., Kissimmee—Osceola Co. sold $100,000 bonds to build road from Kissimmee to Loughman Dist. 2. Noted July 12.

Ala., Russellville — Franklin Co. made surveys for Jackson Highway. About $20,000.

La., East Baton Rouge—(Baton Rouge P. O.)—City will sell $50,000 bonds for improving and repairing roads. F. A. Woods, secy., police jury.

La., Point a la Hache—Plaquemines Co. plans to repair shell road from here to St. Bernard parish line. About $24,000. State Highway Dept., New Orleans, to pay half of cost of work.

Tenn., Chattanooga—Hamilton Co. plans repairing and rebuilding entire La Fayette Rd. from Rossville to Georgia Monument.

Tenn., Dyersburg—Dyer Co. court plans building 24-mi. Jefferson Davis Highway. About $250,000. State and Federal Government to contribute towards cost.

O., Cincinnati — City to sell $140,000 bonds Oct. 15 to improve portion Madison Rd., wood block; paving gutters, brick, and balance roadway with bitulithic, setting granite curbs and constructing necessary addition to water mains. Noted Sept. 13.

O., Cincinnati—City plans improving and paving Chickering, 28th, Race, Watelly, Walworth and Tweed Sts. F. Krug, city engr.

O., Lima—City plans to improve portion High St., cost $15,500; Linden St., $8000; Ontario Ave., $7000; Walnut Alley, $4000; Hickory and Court alleys, $5500. C. Bryson, city engr.

Ind., Ft. Wayne — (Official) — Allen Co. sold $19,200 bonds for highway improvements. Noted Sept. 27.

Ind., Indianapolis—Marion Co. will sell $38,500 bonds for road improvements. E. G. Sourbier, co. treas.

Ind., Indianapolis—City plans to improve and pave portions Maple, Meridian, Temple and Illinois Sts., and 2 alleys. B. J. T. Jeup, city engr.

Mich., Benton Harbor—City plans to pave portion Colfax Ave. M. L. Jones, city engr.

Mich., Charlevoix—Charlevoix Co. plans to issue $300,000 bonds to improve roads.

Ill., Chicago—Cooke Co. election in November to vote on $1,000,000 bond issue to improve 80 mi. of roads.

Ill., Freeport—Stephenson Co. plans State Aid Highway, brick, with 10-ft. roadway and 4-ft. gravel shoulder. About $23,442. M. H. Butterfield, co. surv.

Ill., Pekin—City plans to extend Court St. paving to East Bluff, monolithic. B. F. Smith, city engr.

Ill., Rockford—Winnebago Co. election Oct. 30 to vote on $145,000 bond issue to build road from city limits to Boone Co. line, via Charles St. Rd. and Cherry Valley.

Ill., Woodstock—McHenry Co. plans to improve road from Woodstock toward Marengo. also Harvard-Alden Rd. in Harvard Twp.. About $23,972.

Minn., St. Paul—City plans paving portion Pascal Ave., brick. About $18,640. O. Claussen, city engr.

Kan., Kansas City—Wyandotte Co. had plans prepared for repaving main thoroughfares. About $23,000. O. K. Williamson, co. engr.

Kan., Wichita—Council passed ordinance paving portions Indianola, Lawrence, Estelle and Loraine Aves., Gilbert, Kellog, Market and English Sts., also alleys between Topeka and Emporia Aves. A. Brockway, city engr.

Streets and Roads (Continued)

Mont., White Sulphur Springs—Montana Good Roads Assn. plans to build 408-mi. "Y-G Bee Line Railway" between Yellowstone and Glacier National Park. Scott Leavitt, Great Falls, pres.

Mo., Centerville — Reynolds Co. plans $100,000 bond issue for building and improving roads.

Mo., Charleston—Mississippi Co. having plans prepared for system of gravel roads. Bonds for $375,000 sold for work. Noted Aug. 9.

Mo., Doniphan—(Official)—Ripley Co. at election Oct. 2 defeated $200,000 bond issue for improving roads. Noted Aug. 30.

Ark., Conway—(Official)—City receiving bids about Feb. 1, paving Dist. No. 8. B. G. Wilson, engr.

Texas—State Highway Dept., Austin, making preliminary surveys for roads through Cameron, Hildalgo, Brooks, Kleberg and Neuces Cos. Federal Government appropriated $800,000 for work in Texas. M. C. Welborn, div. engr.

Tex., Corsicana—Navarro Co. voted $80,000 bonds for roads in Rice Precinct, Dist. No. 12. Noted Sept. 6.

Tex., Georgetown—Williamson Co. plans paving portion Meridian Highway from Travis Co. line to Bell Co. line, bituminous macadam; with State and Federal aid. About $115,000.

Tex., Gilmer—Upshur Co. voted $25,000 bond issue for building roads.

Tex., Longview—State Highway Comn., Austin, apportioned $15,000 of Federal Government appropriation to build roads in Gregg Co.

Tex., Post—Garza Co. voted $65,000 bonds to build roads.

Tex., Sweetwater—Nolan Co. plans to improve and complete Ft. Worth-El Paso and Canadian and Del Rio Highways. About $132,179. County to appropriate $97,650 toward cost, Federal Government, $27,080; State, $7449.

Okla., Miami—City plans election Nov. 20 to vote on $350,000 bond issue for road work. Noted June 28.

Okla., Oklahoma—City soon receives bids paving portion Shields Blvd. G. V. McClure, city engr.

Okla., Ponca City—City plans paving 34 blocks, brick. C. B. Harold, clk.

Idaho—(Official)—State Highway Dept., Boise, lets contract in April, 12-mi. state highway, through Grangeville Highway Dist. About $35,000. A. H. Wetherbee, secy.

Idaho, Twin Falls—City Council soon receives bids paving alleys in L. I. D. No. 29. About $14,000. J. A. Bybee, city engr.

Wash., Davenport—Lincoln Co. Comrs. plan to spend about $65,000 to build roads.

Wash., Seattle—City had plans prepared paving Marion Ave., involving 524,000 cu. yd.; armored concrete curb, 95,000 ft.; asphalt paving 5-in. concrete base, 42,000 sq. yd.; 6-in. concrete base, 14,000 sq.yd.; asphalt top, 1900 sq.yd.; concrete paving, 6-in. base, 28,000 sq.yd.; brick block paving, 6-in. concrete base, 66,000 sq.yd.; 7-in. concrete base, 24,000 sq.yd. A. H. Dimock, city engr.

Wash., Waterville—Douglas Co. will soon receive bids building Permanent Highway No. 4. About $10,000.

Ore., Dallas—Polk Co. Comrs. had plans prepared for paving Dallas-McMinville Rd.

Ore., Enterprise—Wallowa Co. plans to build with State and Federal aid Flora-Enterprise Rd., to be part of forest roads. About $29,000.

Ore., Gold Beach—Curry Co. having plans prepared by State Highway Dept., Salem, for road from Coos Co. line to California line. Noted Sept. 27.

Ore., Roseburg—City Council authorized paving Rose and Hamilton Sts. About $12,000.

Ore., The Dalles—Wasco Co. received no bids for Dalles-Durfur Sect. of Dalles-California Highway. Noted Sept. 20.

California—State Highway Comn., Sacramento, will build roads in various counties, cost to be borne by Highway Comn. and counties: (a) cost of entire road, (b) state's contribution: Weaverville-Eureka Rd., (a) $1,175,000, (b) $393,240; Pacheco Pass Rd., (a) $1,618,413, (b) $541,650; Yosemite Rd., (a) $533,544, (b) $178,650; Coalinga-San Lucas Rd., (a) $1,503,518, (b) $502,860; Famosa-Passo Robles Rd., (a) $1,339,596, (b) $448,320; San Bernardino-Barstow Rd., (a) $534,112, (b) $178,770; San Bernardino-Yuma Rd., (a) $2,260,362, (b) $756,510. A. B. Fletcher, state highway engr.

Cal., El Cajon—Town defeated $11,500 bonds building state highway through town, concrete. Noted Aug. 30.

Cal., Oroville—Butte Co. plans to pave Sacramento and Reading Aves. C. F. Belding, co. clk.

Cal., San Diego—City had plans prepared improving Park Blvd. Indiana St., and Robinson Ave. About $35,173. G. Cromwell, city engr.

Cal., San Francisco—Bd. Pub. Wks. appropriated an additional sum $400,000 for street repair work; $23 375 of amount to be spent on repaving portion Mission St. M. M. O'Shaughnessy city engr.

Ont., Sandwich—West Township lets contract about Oct. 15 for building concrete pavement. About $30,000. J. J. Newman, David Bldg., Windsor, engr.

BIDS DESIRED

N. J., Jersey City—(Official)—Until Oct. 18, by Bd. Comrs., improving Dwight St. and De Kalb Ave.; asphalt paving on concrete base; Van Cleef St. and Germania Ave., bituminous concrete on concrete base. C. A. Van Kuren, city engr. Noted Oct. 4.

N. J., Jersey City—Until Oct. 23, by City repaving portion Tonnele Ave., wood block. C. A. Van Kuren, city engr. Noted July 12.

N. J., South Orange — (Official) — Until Oct. 16, by Twp. Com., macadam pavements, cement sidewalks and curbing on Walton Ave. and Wellesley St. I. T. Redfern, engr. Noted Sept. 20.

W. Va., Morgantown—Until Nov. 6 by Monongalia Co. Court, paving Deckers Creek Rd. in Morgan Dist., concrete or macadam.

W. Va., Wayne—Until Oct. 13, by S. J. Crum, clk. Wayne Co., road in Union Dist., and Mill Creek Rd., Butler Dist.

O., Bryan—(Official)—Until Oct. 20, by J. A. Neill, village clk., improving portion Wilson, High and Union Sts.

Indiana—By Co. Comrs. building roads as follows: Oct. 26, Marshall Co., Plymouth, 5 gravel roads, Tippecanoe, Center, German, Union and Walnut Twps. O. H. Weber, aud. Oct. 27, Grant and Huntington Cos., Marion, stone road, Van Buren Twp., Grant Co., Jefferson Twp., Huntington Co. M. McRae, aud. Oct. 29, Marion Co., Indianapolis, building and improving Southeastern Ave., Warren Twp. L. K. Fesler, aud. Nov. 6, Harrison Co., Corydon, 11,471 ft. road between Posey and Webster Twps. S. C. Mauck, aud. Nov. 6, Jasper Co., Rensselaer, 2 stone roads Marion and Barkley Twps. J. P. Hammond, aud.

Ill., Berwyn—(Official)—Until Oct. 16, by J. M. Humiston, secy. bd. local impvts., grading and paving portions Clinton, Wisconsin, Harvey and Wenonah Aves.; advertised in this issue.

Ill., East St. Louis—Until Oct. 15, by Bd. Pub. Impvts. brick paving, marginal and sandstone curb, vitr. pipe on State St.; also bridge over drainage canal. About $300,000. E. S. Harper, 1413 State St., engr.

Ark., Conway—Until Oct. 22, by Faulkner Co. Rd. Impvt. Dist. No. 1, for 9-mi. hard surface roads. W. J. Grummer, secy. B. G. Wilson, engr.

Idaho, Bonners Ferry—(Official)—Until Oct. 20, by Boundary Co. for hillside grading and building small bridges. About $63,000. J. V. Stanley, clk. Noted Sept. 27.

Washington — Until Oct. 22, by State Highway Comn., Olympia, grading and draining 12 mi. Sunset Highway. Noted Sept. 27.

Wash., Ephrata—Until Oct. 22, by Grant Co. Comrs., surfacing 3 mi. Permanent Highway No. 10, also 2 mi. Permanent Highway No. 8A. Noted Aug. 30.

Cal., San Diego—Until Oct. 17, by J. B. McLees, clk. San Diego Co., building highway near Riverview.

Ont., Cornwall—Until Oct. 17, by A. I. MacDonell, co. clk., building 60 mi. waterbound macadam or bituminous macadam roads in Stormont, Dundas and Glengarry Cos. J. G. Cameron, Finch, co. road supt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts—State Highway Dept., Boston, let contract paving roads in Westford to J. E. Watkins, Amesbury, $10,383; Braintree to E. C. Sargent, Adams Bldg., Quincy, $17,719; Deerfield, B. Perini & Co., Ashland, $22,655; Egremont and Sheffield, L. C. Fay & Co., 318 Main St., Springfield, $52,315. Noted Oct. 4.

★Massachusetts—(Official)—State Highway Comn., Boston, let contract 5000 ft. highway in Stockbridge to Lane Constr. Corp., 37 Colony St., Meriden, Conn., $17,238. Noted Sept. 27.

★Mass., Boston—City let contract paving Grove St., East Boston, Museum Rd., Roxbury, and Minton St., West Roxbury, sheet asphalt and topeka, to Warren Bros., 162 Berkeley St.; about $16,800; Cliffmont St., West Roxbury, bituminous macadam to M. De Matteo, 146 Dudley St., Roslindale, about $19,827.

N. Y., Buffalo—(Official)—City received low bids paving portions Walnut St., from Erie Contg. Co., Morgan Bldg., brick, $13,000; German Rock Asphalt Co., Morgan Bldg., asphalt, $11,650; H. P. Bugard Co., standard asphalt, $12,100. Noted Oct. 4.

★N. Y., Fulton—City let contract 13.4 mi. paving and curbing to Pathfinder Constr. Co., $75,000. Noted Aug. 9.

★N. Y., Tarrytown—Bd. Trustees let contract paving Bway. to H. B. Sproul, 105 South Division St., Peekskill. Noted June 28.

★N. J., Jersey City—(Official)—City let contract paving Central Ave., involving 30,035 sq.yd asphalt, and 20-in. c.-i. water main, to Clinton Constr. Co., 306 Charles St., Hoboken, 98%. Noted Sept. 27.

★N. J., North Bergen—(Weehawken P. O.)—Twp. let contract repaving 31st St. to Clinton Constr. Co., 306 Charles St., Hoboken, $20,761; Bulls Ferry Rd., to Nolan & Hornung, 309 Kerrigan Ave., Union, $32,320. Noted Sept. 20.

★N. J., Princeton—Boro. Council let contract rebuilding Stockton St., warrenite, to Reardon Co., Princeton. About $35,649. Noted July 26.

W. Va., Charleston—(Official)—City received low bid paving and curbing several streets and alleys from Central Eng. Co., Charleston, $58,688. Noted Sept. 6.

★W. Va., Huntington—City let contract paving portions Doullton and Olney Aves., 30th and 3rd Sts., Dixie block, to J. Ullom, $23,485.

★Ky., Covington—Kenton Co. Comrs. let contract paving road south from Lexington Turnpike, waterbound macadam, to J. Exterkamp, 8th and Phila. Sts. About $10,000.

★O., Bryan—Williams Co. Comrs. let contract road work to A. M. Acker, Bryan, Doughton Rd., 2 mi., waterbound macadam, $22,000; C. Thomas, 23 East Jackson Blvd., Chicago, Stryker Rd., macadam, $38,000; J. A. Elder, Bryan, Cassell Rd., waterbound macadam, $22,500; Brannon Constr. Co., Bryan, Mt. Pelier Rd., 2 mi., bituminous macadam, $234,000. Noted Sept. 6.

★O., Bryan — (Official) — Williams Co. Comrs. let contract building 1.94 mi. public highway in Springfield Twp., to Chas. Thomas, Stryker, $20,947. Noted Sept. 20.

★O., Cleveland—Bd. Control let contract paving and improving portion Locke Ave., to O. J. Leach, 504 Eddy Rd. About $18,416. Noted Aug. 23.

O., Cleveland—(Official)—City received low bids paving Ivanhoe Rd., grade elimination, from Rieley Bros., 348 Arcade, $24,252; and Baldwin Bros., 560 Rose Bldg., $35,436. Noted Sept. 20.

O., Cleveland — (Official) — City received low bid grading, draining, curbing and repaving Sect. 1, Woodhill Rd., from B. M. Pejsa Co., 2359 East 93rd St., $62,770; Sect. 2 from Baldwin Bros. Co., 560 Rose Bldg., $60,450. Noted Sept. 27.

★O., Hamilton—City let contract paving West Main St. to Federal Asphalt Paving Co., $34,481; Grand Blvd. to Andrews Asphalt Co., $50,153; both of Reutschler Bldg., Hamilton. Noted Sept. 27.

★Indiana—(Official)—Bd. Co. Comrs. let contract building roads various twps. as follows: Bartholomew Co., Columbus, gravel road, Washington Twp., to A. H. Fry, Columbia City, $9565; Vermilion Co., Newport, 2 gravel roads to J. Bonwell, Dana, Ind., $8594; Clinton Co., Frankfort, gravel roads Perry Twp. to W. J. Nees,

Streets and Roads (Continued)

J. C. Miller and Thompson & Kelley, all of Frankfort; Elkhart Co., Goshen, concrete road, Concord Twp. to Foley Constr. Co., 127 North Dearborn St., Chicago, $8895. Noted Sept. 20.

Ind., **Indianapolis**—City received low bid paving portions Gladstone Ave., asphalt, from Union Asphalt Constr. Co., 308 Amer. Central Life Bldg., $4.51 per lin.ft.

★**Michigan** — State Highway Comn., Lansing, let contract grading 9½ mi. road from Montague to New Era, to C. P. Walker, Fremont, $63,460. Noted June 21.

★**Mich., Kalamazoo**—Kalamazoo Co. Rd. Comrs. let contract building road from Yorkville to east side of Gulf Lake & Turners Resort, Dist. No. 1, to H. A. Nichols, Hastings, $23,972. Noted Sept. 20.

★**Mich., Pontiac**—Oakland Co. let contract building 3 mi. Elizabeth Lake Rd., and 2½ mi. Clawson Rd., Royal Oak twp., concrete, to Ladue & Scotten, Penobscot Bldg., Detroit, $54,961 and $54,422 respectively; 7 mi. Maple Ave., Bloomfield Twp., concrete, to Slater Constr. Co., Pontiac, $143,106.

★**Ill., Rock Island**—City let contract paving portions 15th, West 17th and 18th Sts., and 4th Ave., to McCarthy Co., 3rd and Perry Sts., Davenport, Ia. About $2.37, $2.32, $2.30, and $2.32 per sq.yd. respectively. Noted Sept. 13.

★**Ill., Springfield**—City let contract paving and curbing portions of 13th St., brick, to J. A. Pattison Co., Springfield, $1.80 per sq.yd. and 58c. per lin.ft. respectively.

★**Mont., Butte**—Silver Bow Co. let contract paving guttering, draining and curbing portion South Montana St., to J. C. Maguire, 615 Daly Bank Bldg. About $13,673. Noted Sept. 13.

★**Mo., St. Joseph**—Bd. Pub. Wks. let contract paving portion Duncan St., asphaltic concrete, to Metropolitan Paving Co., 7th and Olive Sts. Noted July 5.

★**Ariz., Phoenix**—City let contract improving portion Willetta and Van Buren Sts., Grand and 7th Aves., to Southwestern Contr. Co. About $54,000.

★**Ariz., Prescott**—Yavapai Co. let contract 5-mi. concrete highway from Jerome to Clarkdale, to Fleming & Stitzer, Prescott. About $65,000.

★**Wash., Seattle** — (Official) — King. Co. Comrs. let contract grading and graveling road between Renton and Renton-Junction, to E. J. Macquaid, 6556 3rd Ave., N. W., $14,083. Noted Oct. 4.

Wash., Seattle—City received low bids paving Beacon Ave., from J. B. Romano, 3314 16th Ave., $33,897; Superior Constr. Co., 1642 Lane St., $34,160; P. J. McHugh, 3rd and North Mercer St., $34,501.

★**Oregon**—State Highway Dept., Salem, let contract macadamizing Pacific Highway from Grants Pass to Josephine Co. line, 8 mi., to A. Anderson, Grants Pass.

★**Ore., The Dallas**—Wasco Co. Court let contract paving portion Columbia Highway between Mosier and Chenowith Creek, to Elliott Contr. Co., McKay Bldg., Portland. About $70,124. Noted Sept. 20.

Cal., Los Angeles—(Official)—City received low bid improving Sherman Dr., from W. M. Ledbetter, 1 Pacific Electric Bldg., $24,000. Former contract was rescinded and work readvertised. Noted Sept. 27.

Cal., Los Angeles—Bd. Pub. Wks. received low bid building concrete pavement, cultivating and oiling 6 mi. Reseda Ave., from G. H. Oswald, O. T. Johnson Bldg. About $140,000. Noted Sept. 27.

Cal, Los Angeles—City received bids grading and constructing bitulithic pavement, storm drains and sewers on West 1st St., from G. H. Oswald, O. T. Johnson Bldg., $213,000; Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., $222,622. Noted Oct. 4.

★**Cal., Oroville**—(Official)—Butte Co. rejected bids improving roads in Dist. No. 2. All work to be done by day labor. Noted Sept. 20.

★**Cal., South Pasadena**—City let contract improving Fremont Ave., to Montgomery & Ducey, 151 South Hill St. About $21,816. Noted Sept. 27.

★**Que., St. Alexis**—Municipal Council let contract building macadam road to Pierre Laberge, Riviere du Moulin, Chicoutimi. Noted June 21.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

New Jersey—See "Buildings," Newark.

Ohio—See "Industrial Works," Youngstown.

Colorado—See "Miscellaneous," Denver.

Utah—Oregon Short Line R.R. plans to spend about $1,000,000 for building 40 mi. feeder lines in northern Utah and southern Idaho. Plans provide for extension of 3.85 mi. to Baker Spur north of Brigham and 9.65 mi. from Garland to Beaver River City. Other improvements to be made in southern Idaho include branch from Menan to Annis, 2.73 mi.; Lincoln and Furth, 2 lines, 3.59 and 7.44 mi., from Collins, N. E., 7.26 mi. and Keever to Thomas, 4.55 mi. C. Stradley, Salt Lake City, ch. engr.

California—Pacific Electric R.R. plans to build electric line from Redlands to Yucaipa Valley, about 13 to 14 mi. J. McMillan, Pacific Electric Bldg., Los Angeles, genl. mgr.

EXCAVATION AND DREDGING

Proposed Work

Ala., Haynesville — Drainage — Lowndes Co. making preliminary surveys for system to drain 20,000 acres, vicinity of Letohatchie Creek. About $200,000. J. R. Scott, Sarasota and Barstow, Fla., engr.

Miss., Carrollton—Drainage—Potacocowa D.D. retained Morgan Eng. Co., engrs., Goodwyn Institute, Memphis, Tenn., to make surveys and prepare plans for system to reclaim 25,000 acres, Potacocowa Creek.

Minn., Anoka—Ditch—Anoka Co. soon receives bids building Co. Ditch No. 59. About $35,000. F. J Armstrong, 721 Germania Life Bldg., St. Paul, engr.

Minn., Anoka—(Official)—Ditch—Anoka Co. rejected bids building Co. Ditch No. 60. Noted Sept. 20.

Minn., Fairmont—Ditch—Martin Co. had plans prepared by Jones & Curtiss, engrs., 241 Pfeiffer Bldg., for Judicial Ditch No. 82. About $50,000.

Minn., St. Cloud — Ditch — Stearns Co. plans to build Co. Ditch No. 44, 27-mi. long. About $46,000. N. Thomry, co. aud.

Minn., Slayton — (Official) — Ditches — Murray Co. rejected bids building Judicial Ditch No. 19, involving 101,000 ft. 6- to 26-in. tile, cost, $44,542; Co. Ditch No. 6, 32,700 ft. 6- to 28-in. tile, $15,315. Noted Sept. 20.

Colo., Mancos—Ditch—Dir. Summit Land & Irrigation Co. plan to build new intake ditch. About $56,000 available for work. J. W. Ritter, chn.

BIDS DESIRED

N. Y., Albany—(Official)—Barge Canal Improvements—Until Nov. 2, by W. W. Wotherspoon, supt. pub. wks., Capitol; advertised in this issue.

Ga., Athens—Drainage—Until Oct. 23, by Beaver Dam D.D. No. 1, building 13-mi. ditches along Beaver Dam Creek to reclaim 1600 acres. About $35,732. H. H. Hampton, comr. C. M. Straham, Athens, engr. Noted Sept. 27.

Ia., Sibley—Drainage—Until Nov. 2, by Osceola Co., building D.D. No. 26, involving 57,230 ft. 6- to 30-in. tile. D. W. Clayton, aud.

S. D., Sioux Falls—Drainage—Until Oct. 13, by E. H. Shonkle, aud., Minnehaha Co., cleaning and deepening 10-mi. channel D.D. Nos. 1 and 2, also cutting 2-mi. ditches, 20-ft. bottom, and straightening Big Sioux River, north of Sioux Falls, part of D.D. Nos. 1 and 2. H. M. Derr, Pierre, state engr.

Tex., Anahuac—See "Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., Jersey City—See "Miscellaneous."

★**Ill., Pittsfield** — (Official) — Canals — Canal Comrs. Sny Island Levee D. D. let contract building 3½ mi. canals, 30-ft. bottom, involving levee and auxiliary side ditches and 358,500 cu.yd. excav., to A. V. Wills & Sons, 517 Boatmans Bank Bldg., St. Louis, Mo., 15c. per cu.yd. Noted Sept. 28.

★**Ia., Estherville**—Ditch—Emmet Co. let contract building D. D. No. 108, to Cement Products Co., Estherville, tile, $18,518; M. J. Ayhoard, Spencer, labor, $11,492. Noted Sept. 27.

★**Minn., Anoka** — (Official) —Ditch—Anoka Co. let contract building Co. Ditch No. 41 to K. C. Richardson, Anoka, $16,400. Noted Sept. 20.

★**Minn., Le Sueur**—(Official)—Ditch—Le Sueur Co. let contract building Co. Ditch No. 45 to V. E. McDonald, Meriden, $27,004. Noted Sept. 20.

★**Minn., Walker**—(Official)—Ditch—Cass Co. let contract building Judicial Ditch No. 8, involving 98,925.8 cu.yd. excav. and Judicial Ditch No. 9, Cass and Wadena Cos., 104,462 cu.yd. excav. to E. E. Griffith, Backus, .1045c. per cu.yd.

Cal., Modesto— Canal — Modesto Irrigation Dist. received low bids building sections concrete lining in main canal between Rariden Fill and Salter Fill, from C. E. Cotton, 16 California St., $30, 230, and Tieslau Bros., Builders' Ex., both of San Francisco, $30,492.

★**Cal., Stockton**—Canal—West Side Irrigation Dist. let contract building 40 mi. canals to Johnson Bros., Tracy and C. H. Laiklin, Manteca, $55,000; building bridge over intake canal to Jacobs & Sayles, Stockton, $2488. Noted Aug. 9.

INDUSTRIAL WORKS

Proposed Work

Conn., Middletown—Mattabosset Brewing Co., c/o S. P. Moscalitts, 84 Veteran St., Meriden, soon lets contract 5-story, 80 x 88-ft. concrete plant. About $75,000. C. H. Hottinger & Co., Rowe St., Roslindale, Mass., archts.

N. Y., Cobleskill—J. Kayser & Co., 45 East 17th St., New York City, plans to build silk factory on East Main St. About $50,000.

N. Y., New York—T. J. McCahill, 45 East 42nd St., having plans prepared by G. W. Culgin, archt., 15 Broad St., for garage at 144-148 East 41st St. About $75,000.

N. Y., New York—Oval Garage Corp., 950 Ave. St. John, soon lets contract 3-story, 100x150-ft. brick and concrete garage on Whitlock Ave. and Faile St. Goldner & Goldberg, 391 East 149th St., archts. About $75,000. Noted May 24.

N. J., Garfield—(Passaic P. O.)—Passaic Bakers' Exchange plans bakery and flour warehouse, Maple Ave. and Van Winkle St. About $75,000.

N. J., Gloucester City — Pennsylvania Shipbuilding Co. having plans prepared by G. F. Pawling & Co., engrs., 1438 South Penn Sq., Phila., for several 1-story buildings. About $1,000,000.

N. J., Newark—Goodyear Tire & Rubber Co., 123 Washington St., plans 6-story, 100x250-ft. brick and concrete warehouse.

N. J., Paterson—Commonwealth Chemical Co. plans new factory East 42nd and East 43rd Sts. About $100,000. Address E. C. King.

Pa., Scranton—Industrial Bureau of Bd. Trade plans 4-story, 50 x 140-ft. incubator factory. About $100,000.

Md., Baltimore—Poole Eng. Co., West of N. C. Ry. and north of Padonia Sta., had plans prepared for 150 x 500-ft. gun factory east of its Woodbury plant. About $2,000,000.

N. C., Rockingham—Steele Mills Co. plans to build additions to plant, including 1½-story, 175x285-ft. weave shed. About $300,000.

S. C., Columbia—See "Streets and Roads."

Ala., Birmingham—Tennessee Coal Iron & R.R. Co., 9th Ave., plans new electrically driven mills and other improvements. About $11,000,000.

La., Monroe — Vicksburg, Shreveport & Pacific R.R. plans additions to shops, including 97 x 120-ft. machine shop, blacksmith shop, etc. About $100,000. H. B. Hearn, Shreveport, supt. Arnold Eng. Co., 105 South La Salle St., Chicago, engrs.

La., New Orleans — Standard Brewing Co., 514-32 North Johnson St., plans to rebuild bottling plant recently destroyed by fire. About $70,000.

O., Columbus—Federal Chemical Co., Lincoln Bldg., Louisville, Ky., plans sulphuric acid plant here. About $250,000. W. Crady, mgr.

O., Youngstown—Youngstown & Suburban Ry. plans power plant at Southern Park and addition to one at South Side Park; also double tracking lines. A. M. Hartford, 21-23 East Front St., genl. mgr.

Industrial Works (Continued)

Ind., Kokomo—Kokomo Rubber Co., 1042 South Main St., will increase its capital stock from $200,000 to $1,000,000, and plans addition to plant.

Ind., Whiting—Great Western Smelting & Refining Co., of Chicago, purchased 25-acre site between New York Ave. and Indianapolis Blvd., and plans to build plant. About $50,000.

Mich., Port Huron—Mueller Mfg. Co., 512 W. Cerro Gordo St., Decatur, Ill., plans additional factory here, including 86 x 140-ft. brass foundry, 80 x 100-ft. rod mill, power house, sheds, etc. About $400,000. A. Mueller, pres.

Wis., Ashland—Ashland Light, Power & Street Ry. Co., 212 West 2nd St., plans 1200-h.p. hydro-electric plant on falls at mouth of Montreal River. About $100,000. F. R. Winders, genl. supt.

Wis., Milwaukee — Kieckhefer Box Co., 16th St. Viaduct, plans 1-story, 190.6 x 217-ft. rein.-con. and brick addition to plant. About $50,000. J. W. Kieckhefer, pres.

Minn., Minneapolis—Electric Machinery Co., 14th Ave. and Tyler St., N. E., plans to build an addition to its plant. About $50,000.

Minn., Minneapolis—Federal Steel & Mfg. Co., 609 5th St., S., recently purchased 12 acres land and plans 3 110 x 400-ft. machine shops and 100 x 125-ft. foundry. About $500,000. F. D. McClure, pres.

Minn., Minneapolis—Minneapolis Steel & Machinery Co., 29th St., and Minnehaha Pkway., having plans prepared for addition to plant.

Minn., Minneapolis — M. Pfaum, of G. Pfaum & Sons, and B. Zimmer of Twin City Mission Furniture Co., 2285 Hamp St., plans factory, Marquette Ave., and 19th St. About $200,000.

Neb., Omaha—Emerson-Brantingham Implement Co., 1101 Jackson St., plans to build warehouse. About $90,000.

Mo., St. Louis—Monesato Chemical Co., 1800 South 2nd St., had plans prepared for a new plant. About $1,000,000. Brennecke & Fay, Fullerton Bldg., archts. Noted Sept. 20.

Tex., Houston—Texas Textile Co., recently organized with capital stock of $250,000, plans 60x200-ft. factory. About $50,000. B. N. Garrett, pres.

Okla., Vinita—Southwestern Power Co., Vinita, plans power plant here, to include string of 3 dams across Grand River. About $2,000,000.

N. M., Clovis—See "Buildings."

Wash., Spokane—Sperry Flour Co., 662 Mallon St., plans addition to plant. About $300,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—New York Shipbuilding Corp., 120 Bway., New York City, let contract steel shipbuilding plant to American International Corp., 120 Bway., New York City. About $1,000,000.

★Mass., Brightwood—Springfield Aircraft Corp. has taken over main building of Wason Mfg. Co., and let contract for addition to same to F. T. Ley & Co., 495-275 Main St. About $50,000.

★N. Y., Buffalo—Standard Oil Co., 26 Bway., New York City, let contract 5-story, 60x207-ft. rein.-con. storage warehouse to H. D. Best Co., 52 Vanderbilt Ave., New York City. About $100,000. Noted Oct. 4.

★Pa., Phila.—Dept. Health and Charities let contract power house, 34th and Pine Sts., for Phila. General Hospital, to Standard Constr. Co., Drexel Bldg., $238,600.

★Ky., Louisville—Kentucky Pub. Elevator Co., 14th and Gallagher Sts., let contract rebuilding grain elevator recently destroyed by fire, rein.-conc., to Witherspoon-Englar Co., 53 West Jackson Blvd., Chicago. $200,000. Noted Sept. 6.

★Ill., Mattoon—Illinois Central R.R. let contract for roundhouse to J. E. Nelson & Sons, 118 North La Salle St., Chicago. About $100,000. Noted Sept. 27.

★Tex., Dallas—E. B. Doggett let contract 90 x 100-ft. brick and rein.-con. warehouse to G. W. Moore Constr. Co., 706 Sumpter Bldg. About $50,000.

★Ont., Hamilton—American Can Co., Emerald St., N., let contract addition to factory to W. H. Cooper, Clyde Bldg. About $125,000.

★B. C., Victoria—Dominion Government let contract 1-story, 200 x 700-ft. warehouse to Grant Smith & Co., Henry Bldg., Seattle, Wash.

BUILDINGS

Proposed Work

Mass., New Bedford—Lodge—Loom Fixers' Union plans, 3-story, 70 x 78 ft. About $60,000. Geo. Newton, pres. J. I. Higgins, 44 Borden Blk., Fall River, archt.

N. Y., Brooklyn—Hospital—Beth Moses Hospital had plans prepared by Henry J. Nurick, archt., 830 Putnam Ave., 5-story, 90 x 100-ft.

N. Y., Buffalo—Depot—New York Central R.R. plans 2-story, 60 x 500-ft. rein.-con., on Curtiss St. About $250,000. G. W. Kittredge, Grand Central Terminal, New York City, ch. engr.

N. Y., Buffalo—Hospital—Mother of Mercy Hospital, c/o. Mt. Mercy Academy, 1475 Abbott Rd., plans, brick and steel. About $200,000. H. Spann, 38 Ardmore Pl., archt.

N. Y., Herkimer — (Official) — Hospitals —Herkimer Co. Bd. Supervs. lets contract about Nov. 15, for 3 tuberculosis hospitals. About $85,000. G. W. Boyle, co. purch. agt. Pember & Champagne, 24 James St., Albany, archts. Noted Aug. 30.

N. Y., New York—Infirmary—Dept. of Correction had plans prepared, 3-story, 32 x 215 ft. About $120,000. C. B. Meyers, 1 Union Sq., archt.

N. Y., Scarsdale — School — Bd. Educ. plans, 2-story. About $55,000. G. Lowell, archt., 225 5th Ave., New York City, soon receives bids.

N. Y., Troy—Laboratory — Rensselaer Polytechnic Institute plans to enlarge its laboratory. About $100,000.

N. J., Newark—Station, etc.—Erie R.R. had plans prepared for new passenger station, steel bridge and yards at 4th Ave. About $875,000. R. S. Parsons, 50 Church St., New York City, ch. engr.

N. J., North Bergen—Schools—Bd. Educ. plans to build 2 new schools. About $150,000.

N. J., Trenton — Capitol — State House Comn., Trenton, had plans prepared enlarging state capitol. About $400,000.

N. J., Wrightstown—Church—Presbyterian Synod of New Jersey, Beverly, plans to build. About $50,000. A. J. Phillips, pastor.

Pa., Phila.—Theatre—Stanley Realty Co. and Mastbaum Bros. & Fleischer, 1426 South Penn Sq., plans 1-story, 152 x 176 ft. About $700,000. Hoffman Co., archts., Finance Bldg., soon receive bids.

Pa., Wyomissing—School—Bd. Educ. plans to build vocational school; $90,000 bond issue to be voted on at November election.

Md., Baltimore—College—Morgan College plans. About $50,000. J. O. Spencer, Fulton and Edmondson Aves., pres. E. Tilton, archt., 52 Vanderbilt Ave., New York City, receives bids about Oct. 15.

W. Va., Charleston — Church — First Christian Congregation plans 1-story, 81 x 115-ft. About $60,000. W. E. Moore, 1112 Virginia St., chn. bldg. com. W. H. St. Clair, Capitol and Quarrier Sts., archt.

W. Va., Princeton—Court House—Mercer Co. Comrs. having plans prepared by A. F. Wyson, archt., 3-story, 90 x 200-ft. About $200,000.

Ala., Birmingham — Schools — Bd. Educ. plans to build high school and 5 elementary schools. Geo. B. Ward, mayor.

La., Shreveport—Hotel—T. C. Barret had plans prepared. Louisiana and Crockett Sts. About $150,000.

Tenn., Chattanooga—Chapel and Science Hall—Chattanooga University plans. About $150,000.

O., Akron—Store and Office—A. B. Smith, 188 South Main St., receiving bids about Oct. 15 for 4- or 10-story, 40x90-ft., South Main St. About $200,000. W. C. Owen & Co., 407-1900 Euclid Bldg., Cleveland, archt.

O., Cincinnati — Home — Church Federation, Union Central Bldg., plans. About $100,000.

O., Cleveland—Store and Automobile—J. Laronge, of J. Laronge Co., Williamson Bldg., purchased site on Euclid Ave. and East 66th St., and plans to build. Cost between $350,000 to $400,000.

O., Columbus — Research — State plans juvenile research building on West Broad St. About $100,000.

O., Elyria—Office—Elyria Telephone Co. will increase its capital stock from $200,000 to $350,000 and plans automatic telephone system and office building on 2nd St.

O., Gallipolis—Dormitories—Bd. Administration of State of Ohio, Oak and 9th St., Columbus, had plans prepared for 4 dormitories at Ohio Hospital for Epileptics. About $80,000. T. E. Davey, pres.

O., Springfield — School — City election soon to vote on $160,000 bond issue for school. Chas. E. Ashburner, mayor.

O., Youngstown—Club House—Ukrainian Club of Youngstown plans, 1- and 2-story, 53 x 208-ft. About $50,000. H. Lyman Ford, archt., 206 Hippodrome Bldg., Cleveland, soon receives bids.

Ind., Wabash—Hotel—Wabash Hotel Realty Co., c/o. Wabash Cabinet Co., having plans prepared by Nicol & Dietz, archts., 212 Murdock Bldg., Lafayette, 4-story, West Market and Cass Sts. About $115,000. T. F. Vaughn, chn. bldg. com.

Mich., Detroit—Store—Bigelow Co., 1070-2 Penobscot Bldg., having plans prepared by R. H. Marr, archt., Kresge Bldg., for rein.-con. store and garage at 53 East Hancock St. About $60,000.

Ill., Chicago—Bank—South West Trust & Savings Bank, 35th St. and Archer Ave., plans, 2-story, 127 x 160-ft. About $75,000. Weary & Alford, 1907 South Michigan Ave., archts.

Neb., Lincoln—Store—Magee's Clothing and Furnishings, 1109 O St., having plans prepared by E. Davis, archt., 515 Security Mutual Life Bldg., 3-story, 50x142-ft., brick and rein.-con. About $75,000.

Mo., Kansas City—Nurses' Home—Christian Hospital, 27th and Paseo Sts., plans 3-story, 40 x 115-ft. About $75,000. H. F. Holt, 315 East 10th St., archt.

Tex., El Paso—Schools—City plans $100,000 bond issue to build new schools.

N. M., Clovis—Office—Atchison, Topeka & Santa Fe. Ry. plans office buildings and addition to shops. About $100,000. C. F. W. Felt, Ry. Ex. Bldg., Chicago, ch. engr.

Ariz., Phoenix—Capitol—Com. of State Institutions having plans prepared by John B. Lyman, archt., Capitol Bldg., for addition to State Capitol.

Wash., Olympia—Temple—State having plans prepared by Wilder & White, archts., 50 Church St., New York City, for Temple of Justice. About $350,000.

Wash., Spokane — Infirmary — Spokane Co. Comrs. plan, at Tuberculosis Sanitarium at Edgecliff. About $80,000.

Cal., Los Angeles — Store — Harris & Frank, 437 South Spring St., having plans prepared by A. C. Martin, archt., 430 Higgins Bldg., 6-story, 115 x 150-ft. brick, rein.-con., 7th and Hill Sts.

Cal., Sacramento—Home—Chamber of Commerce plans, 7th St. About $50,000. C. C. Virden, pres.

Que., Ste. Anne De Bellevue—Hospital—Military Hospitals Comn., Drummond Bldg., Montreal, receives bids about Oct. 20, limestone and brick. About $200,000.

BIDS DESIRED

N. Y., New York — (Official) — Keeper's House—Until Oct. 23, by Bd. Water Supply, Municipal Bldg., for keeper's house, garage, etc., Silver Lake Reservoir (Borough of Richmond). C. Strauss, pres., advertised in this issue.

Colo., Denver—(Official)—Church—Until Oct. 28, by Marion & Norton, archts., 221 Chamber of Commerce Bldg., 2-story, 100 x 100-ft., concrete and brick, for Washington Park Community congregation. Noted Sept. 27.

Cal., Healdsburg — High School — Until Oct. 22, by F. McConnell, clk. bd. educ. About $90,000. W. H. Weeks, 75 Post St., San Francisco, archt. Noted July 12.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Me., Hallowell — School — State School for Girls, Portland, let contract, 2-story, 50 x 122-ft., brick, to A. Hanson & Son, Water St., Augusta, $50,000. Noted Aug. 9.

★Mass., Athol — Church — Athol Methodist Episcopalian Church Society let contract to L. B. Taylor, Athol, $70,000. Noted Aug. 23.

Buildings (Continued)

Mass., Somerville—High School—Bd. Educ. received low bids, 2-story, 80x86-ft., from J. B. Byrne, Inc., 162 Sydney St., Cambridge, $68,911; J. M. Hartwell, 46 Cornhill St., Boston, $71,950. Noted Oct. 4.

★Mass., Waltham — Theater — W. H. Kingsbury, c/o Funk & Wilcox, archts., 120 Boylston St., Boston, let contract 1-story, 55 x 180-ft., moving picture theater, stores, office and garage, to J. J. Powers, 33 Myrtle Ave., Cambridge, $50,000.

N. Y., Thiells—Home—F. A. Vanderlip, pres. bd. mgrs., Letchworth Village, received only bid from Kelly & Kelly, 12th St., Long Island City, $116,300. Noted Sept. 13.

★N. J., Camden — Bank — Merchants' Trust Co., Bway. and Carman St., let contract 1- and 2-story, 40 x 90-ft., to Chas. McCaul Co., Presser Bldg., Phila. About $100,000. Noted July 12.

N. J., Newark—Fire House—City received low bid 2-story, Sanford Ave., and Palm St., from E. M. Waldron & Co., 6th St. About $50,000. Noted Sept. 27.

★O., Cleveland — Church — Congregation St. Casimirs Polish Church let contract, 1-story, 80 x 140-ft., to C. A. Carson Co., 6408 Euclid Ave. About $100,000.

★Mich., Muskegon—Bank and Office—Union National Bank, 65 West Western Ave., let contract 8-story, 66x132-ft., brick, granite and terra cotta, to Hauser-Owen-Ames Co., 40 Pere St., N. E., Grand Rapids, $350,000. Noted Apr. 26.

★Ill., Chicago — Armory — Dept. Pub. Wks. and Bldgs. let contract to Hansen Bros., 1166 North Clark St., $100,000.

★Wis., Niagara—High School—Bd. Educ. let contract, 2-story, 56 x 138-ft., to D. Hubert, Spies Bldg., Menominee, $60,000. Noted June 5.

★Neb., Lincoln—Store—Rudge & Guenzel, 11th and O Sts., let contract, 7-story, 130 x 142 ft. brick and rein.-con. on N St., to Olson Constr. Co., Chapin Bldg. About $500,000.

★Ark., Conway — Administration—Trustees State Normal School, Little Rock, let contract to G. W. Donaghey, 709 West 3rd St., Little Rock, $87,740.

★Que., Montreal—School—School Comn. let contract, brick and rein.-con., to J. Frenette, 324 Broeboeuf St. About $115,000.

★B. C., Rossland—School—Bd. Educ. let contract, 2-story, brick, to R. Monrieff, Regent Hotel, Vancouver, $65,340. Noted Aug. 30.

FEDERAL GOVERNMENT WORK

Proposed Work

N. Y., Cohoes—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Sept. 24. Noted Oct. 4.

N. Y., Yonkers—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., plans on Buena Vista Ave., from Main to Nepperhan St.

Pa., Lancaster—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., plans on block bounded by North Prince, West Chestnut, Market and Marion Sts. About $225,000.

Wash., D. C.—Machine Shop—Bureau Yards and Docks, Navy Dept., receiving bids about Oct. 15, 5-story, at Navy Yard. About $1,200,000.

Wash., D. C.—Pattern Shop—Bureau Yards and Docks, Navy Dept., receiving bids about Oct. 15, 4-story, rein.-con., at Navy Yard. About $475,000.

Wash., D. C.—Storehouse—Bureau Yards and Docks, Navy Dept., receiving bids about Oct. 15, 5-story, rein.-con., at Navy Yard. About $400,000.

Va., Richmond — Hospital — War Dept., Wash., will build here. N. D. Baker, secy.

Miss., Vicksburg — Levee Work — Third Mississippi River Dist., Box 404, rejected bids constructing 303,000 and 1,000,000 cu. yd. levee work. Noted Sept. 6.

Mo., St. Louis — Supply Depot — War Dept., Wash., N. D. Baker, secy., plans on 2nd and Arsenal St. About $300,000.

Cal., Menlo Park—Hospital, etc.—Bureau Yards and Docks, (F. R. Harris, ch.), Navy Dept., Wash., plans building base hospital, remount station and camp proper here. About $500,000.

BIDS DESIRED

Mass., Chelsea—Hospital—Until Oct. 15. by War Dept., N. D. Baker, secy., 1-story.

Conn., New London — Piers and Quay Walls—Until Oct. 15, by Bureau Yards and Docks, Navy Dept., Wash., at Naval Sta.

Conn., New London—Power House and Machine Shop—Until Oct. 22, by Bureau Yards and Docks, Navy Dept, Wash., at Naval Sta.

N. J., Hoboken—Shore Bulkheads—Until Oct. 15, by War Dept., Wash., N. D. Baker, secy., building at Piers 1 and 2.

Pa., Phila.—Heating System—Until Oct. 22. by Bureau Yards and Docks, Navy Dept., Wash., furnishing and installing in structural shop at Navy Yard.

Md., Indian Head — Laboratory — Until Oct. 15, by Bureau Yards and Docks, Navy Dept., Wash., at Naval Sta.

Wash., D. C.—Experimental Sheet Rolling Mill—Until Oct. 20, by Bureau of Standards, Wash.

S. C., Charleston—Wharf and Trestle—Until Oct. 15, by Bureau Yards and Docks, Navy Dept., Wash., building for magazine on east side Cooper River opposite Charleston Navy Yard.

Ga., Forsyth—Post Office—Until Nov. 9, by J. A. Wetmore, superv. archt., treas. dept., Wash. Noted Oct. 4.

Fla., Key West—Tank and Tower—Until Oct. 30, by Comr. Fisheries, Dept. of Commerce, Wash., D. C., building concrete tower and tank at Biological Sta.

La., Grande Isle—Buildings—Until Oct. 29, by E. P. Bertholf, capt. commandant, U. S. Coast Guard, Wash., D. C., for new buildings and accessories for Coast Guard Sta. No. 214, Barataria Bay; advertised in this issue.

Mich., Detroit—Piers, etc.—Until Nov. 8, by U. S. Eng. Office, Detroit, building timber-crib-concrete piers and excav. of channel, East Approach, for 4th Lock, St. Mary's Falls Canal; advertised in this issue.

Neb., Omaha—Lookouts—Until Nov. 1, by J. A. Wetmore, superv. archt., treas. dept., Wash., for lookouts in U. S. Post Office, Court House and Custom House; advertised in this issue.

S. D., Bellefourche—Post Office — Until Nov. 28, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Mo., Harrisonville — Post Office — Until Nov. 13, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Tex., Austin—Post Office—Until Nov. 14, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Cal., Tiburon — Building — Until Oct. 15, by Bureau Yards and Docks, Navy Dept., Wash., building quarters for marine guard.

Cal., Mare Island—(Vallejo P. O.)—Garbage Incinerator — Until Oct. 15, Bureau Yards and Docks, Navy Dept., Wash., at Navy Yard.

P. R., El Cayey—Radio Towers — Until Oct. 15, by Bureau Yards and Docks, Navy Dept., Wash., building 3 600-ft. radio towers at Naval Sta.

P. R., El Cayey—Buildings—Until Oct. 29, by Bureau Yards and Docks, Navy Dept., Wash., constructing 3 radio buildings at Naval Sta.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—Seawalls—U. S. Engr. Office received low bid building at Ft. Warren, Boston Harbor, from Bay State Dredging Co., 247 Atlantic Ave. Noted Sept. 13.

★R. I., Newport—Dispensary—Bureau Yards and Docks, Navy Dept., Wash., let contract, at Naval Torpedo Base, to F. T. Ley & Co., 495 Main St., Springfield, Mass., $29,700. Noted Sept. 27.

★Conn., New London — Crane — Bureau Yards and Docks, Navy Dept., Wash., let contract furnishing 30-ton revolving crane, Naval Submarine Base, to McMyler-Interstate Co., Bedford, O., $25,500. Noted Oct. 4.

★Conn., New London—Officers' Quarters —Bureau Yards and Docks, Navy Dept., Wash., let contract 2 buildings for Officers' Quarters, at Submarine Base, to R. H. Arnold Co., Woodward Bldg., Wash., D. C., $93,991.

N. Y., Brooklyn—Hydraulic Pumps, etc.—Bureau Yards and Docks, Navy Dept., Wash., received low bids (a) net price and time of completion for 2 complete plants, each consisting of 2 pumps, 1 accumulator and 1 storage tank, (b) net price and time of completion for work complete as outlined in Item 1, conforming to the intent of this specification, but with such modifications of detail as are clearly defined and described in proposal under special heading entitled "Exceptions," from E. J. Smith, 30 Church St., New York City, (b) $56,800; time, 200 days, alternate bid, $59,200, 200 days; Carroll Electric Co., 714 12th St., Wash., D. C., (b) $132,000, alternate, $127,000, time 250 days; Admiral & Co., Inc., 1 Dominick St., New York City, (b) $89,452, 250 days.

★N. Y., Brooklyn—Power House, Foundations—Bureau Yards and Docks, Navy Dept., Wash., let contract to Whitney Co., 101 Park Ave., New York City, $18,186. Noted Oct. 4.

Pa., Phila.—Dredging — Bureau Yards and Docks, Navy Dept., Wash., received only bid dredging in Reserve Basin, Navy Yard, from Maryland Dredging & Contg. Co., Fidelity Bldg., Baltimore, Md., 36c. per cu.yd. in place and disposal of all material. 36c. if dredged material is deposited.

Pa., Phila. — Quarters for Radio Operators—Bureau Yards and Docks, Navy Dept., Wash., received low bids from W. O. Springer, 1624 West Latimer St., $15,070; Hogg Constr. Co., 1634 Sansom St., $15,070; W. W. Austine Co., $16,010; all of Phila. Noted Sept. 20.

★Wash., D. C.—Cement Walks—Comrs. let contract building cement sidewalks (a) 40,000 sq.yd. city walks, (b) 30,000 sq.yd. suburban walks, to W. F. Brenizer & Co., Q and North 1st St., (a) $1.53 per sq.yd. (b) $1.71. Noted Sept. 13.

★Wash., D. C.—Office—War Dept., N. D. Baker, secy., let contract office building on The Mall, to G. A. Fuller Co., Munsey Bldg., Wash., D. C., $500,000, cost plus basis.

★Wash., D. C. — Storehouse — Bureau Yards and Docks, Navy Dept., let contract building storehouse (temporary timber construction) at Naval Operating Base, Hampton Rds., to Wise Granite & Constr. Co., Amer. Natl. Bank Bldg., Richmond, Va., $64,000.

★W. Va., Charleston—Projectile Plant and Air Compressors—Bureau Yards and Docks, Navy Dept., Wash., let contract to Ingersoll Rand Co., 11 Bway., New York City, $22,000.

★Ky., Glasgow—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to H. G. Mitchell, Scottsburg, $40,500, time 12 months. Noted Oct. 4.

★Ind., Kendallville—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to E. A. Steininger, Victoria Bldg., St. Louis, Mo., $46,300. Noted Oct. 4.

★Mich., Detroit—Backfilling—U. S. Engr. Office, Detroit, let contract backfilling walls of 4th lock, St. Mary's Falls Canal, to O. Daniels Co., 38 South Dearborn St., Chicago, $95,580. Noted Aug. 30.

Minn., St. Peter—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, from W. D. Lovell, Minneapolis, $43,750; G. W. Stiles Constr. Co., 209 South La Salle St., Chicago, $44,242; Johnson Constr. Co., Fargo, N. D., $47,997. Noted Sept. 6.

Idaho, Twin Falls — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids (a) limestone, (b) sandstone, from R. E. Campbell, Salt Lake City, Utah, (a) $75,443, (b) $75,443; W. D. Lovell, 1415 S.E. 8th Ave., Minneapolis, Minn., (a) $77,800, (b) $76,800; C. Weitz, 713 Mulberry St., Des Moines, Ia., (a) $79,600 (b) $78,500. Noted Aug. 30.

★Cal., Mare Island—(Vallejo, P. O.)—Grading—Bureau Yards and Docks, Navy Dept., Wash., let contract grading at Navy Yard, to D. O'Day Co., San Francisco, $45,000. Noted Sept. 13.

★Cal., San Francisco—Sick Quarters—Bureau Yards and Docks, Navy Dept., Wash., let contract addition to sick quarters to Schroeder Bros., 256 Folsom St., $30,448.

Cal., San Francisco—Wharf—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids rebuilding west wing of wharf at quarantine station, Angel Island. (a) work complete, using structural steel for cross beams, (b) complete, using rein.-

con. (c) complete, using wood for cross beams; from Thomson Bridge Co., 103 Main St., (a) $26,470, (b) $25,900, (c) $24,640; Healy-Tibbetts Constr. Co., 9 Main St., (a) $26,880, (b) $26,406, (c) $24,848; Duncanson-Harrelson Co., 1405 Chronicle Bldg., (a) $26,894, (b) $26,580, (c) $25,980. Noted Sept. 6.

★**Cal., San Pedro**—Fill—U. S. Eng. Office, 723 Central Bldg., Los Angeles, let contract 120,000 cu.yd. fill, including rip rap protection, to Russell, Green, Foell Co., 2644 Compton St., Los Angeles, $70,000. Noted Aug. 16.

H. T., Kuahua—Mine Storage Building—Bureau Yards and Docks, Navy Dept., Wash., received low bids, steel and frame, at Naval Ammunition Depot, (work complete), from Hamilton & Chambers, Inc., 20 Bway., New York City, $61,400; time 240 days. Noted Sept. 20.

★**Hawaii, Pearl Harbor**—Storehouse—Bureau Yards and Docks, Navy Dept., Wash., let contract to Hamilton Chambers Co., 29 Bway., New York City, $96,670. Noted Sept. 20.

MISCELLANEOUS

Proposed Work

Dock—Portsmouth, R. I.—Rhode Island Marine Constr. & Dry Dock Corp., capitalized at $500,000, plans to build dock here.

Grade Crossing—Trenton, N. J.—Bd. Freeholders Mercer Co. plans to build, at Moore's Sta. About $20,000.

Incinerating Plant—Trenton, N. J.—(Official)—City rejected bids building addition to present crematory. G. B. La Barre, dir. Noted Sept. 13.

Park—Columbia, S. C.—See "Streets and Roads."

Transmission Line—Jacksonville, Fla.—City Comrs. plan to extend electric-light and power-transmission lines from Jacksonville to State Camp. About $49,000.

Garbage Incinerator—New Orleans, La.—City plans. Cost, between $1,250,000 and $1,500,000. W. J. Hardee, city engr.

Incinerating Plant—Kansas City, Mo.—City rejected bids. Noted Aug. 16.

Dams—Vinita, Okla. — See "Industrial Works."

Tunnel—Denver, Colo. — Denver & Salt Lake R.R. will reorganize with $7,000,000 additional capital. Company plans 6 mi. tunnel through James Peak, 35 mi. west of Denver, shortening route to coast at least 200 mi. W. R. Freeman, 302 Boston Blk., and Chas. Boettcher, 507 Ideal Bldg., receivers.

Transmission Line—Robinette, Ore.—Cornucopia Mines Co., Cornucopia, plans 66,000 volt transmission line from Robinette to Halfway, about 12 mi. The company will also build sub-station at Halfway. About $30,000.

Transmission Line—Taylorsville, Cal.—Great Western Power Co. plans line from Veramont Sta. near Taylorsville to Walker copper mine, via Genesee mine, Genesee Valley. About 16 mi.

Breakwater—St. John, N. B.—City soon lets contract for extension to Negrotown Point breakwater. About $738,000.

BIDS DESIRED

Elimination Grade Crossing—Phila., Pa.—(Official)—Until Oct. 17, by Pennsylvania R.R., A. C. Shand, ch. engr., Broad St. Sta., Phila., abolishment grade crossing on Chestnut Hill Branch.

Dam—Anahuac, Tex.—Until Oct. 15, by Trinity River Irrigation Dist., building dam between Turtle Bay and Trinity Bay; also dredging channel from locks to connect Turtle Bay channel. J. Wooten, secy.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Station Finish—New York, N. Y.**—(Official)—Pub. Ser. Comn., 120 Bway., let contract completion of construction and station finish of Brooklyn and Manhattan loop and 4th Ave. subway parts of Bway.-4th Ave. Rapid Transit R.R., Boros of Brooklyn and Manhattan, to D. C. Serber, 1123 Bway., $69,085. Noted Sept. 20.

★**Dam—Waterport, N. Y.**—Western New York Utilities Co. let contract water-power dam, on Orchard Creek, Clark Mills, to C. A. Ingersoll, West Centre St., Medina, $200,000.

★**Harbor Improvements — Jersey City, N. J.**—City Comn. let contract for improvement and development of water front along Hackensack River at foot Yale St., including bulkheads, dredging, etc., to Long-Broadhurst Contr. Co., Contrs. Causeway, Hackensack. About $80,000. Noted Aug. 30.

★**Dock—Seattle, Wash.**—(Official)—King Co. Comrs. let contract, on Duwamish Waterway, to P. B. Church & Co., Arcade Bldg., $34,500. Noted Sept. 6.

★**Wharf Extension—Benicia, Cal.**—Benicia Shipbuilding Co. let contract to Duncanson & Harrelson, Chronicle Bldg., San Francisco, $10,000.

★**Pavilion—Manhattan Beach, Cal.**—City let contract, to W. M. Bell, 1046 W. 92nd St., Los Angeles, $19,693.

★**Docks, etc. — Ojibway, Ont.** — Canada Steel Corp., subsidiary of U. S. Steel Corp., let contract building docks, etc., including canal running through property for distance of 2500 ft., to be 200 ft. wide and 25 ft. deep, docks on banks of canal, also 1000 ft. dock on river front with marine slip and wharves, to Great Lakes Dredging Co. of Canada, Port Arthur. Cost between $25,000,000 and $30,000,000. Noted Aug. 30.

The Uni-Form Company, 10 High St., Boston, Mass., which manufactures the new system of steel forms for construction of reinforced concrete buildings, described on page 480 of the September 6th issue of "Engineering News-Record" in which system the whole form structure is of steel, being made up of channels and arch plates, coupled by bolts and spreaders, is inviting correspondence from agents in different parts of the country with a view to forming licensee connections.

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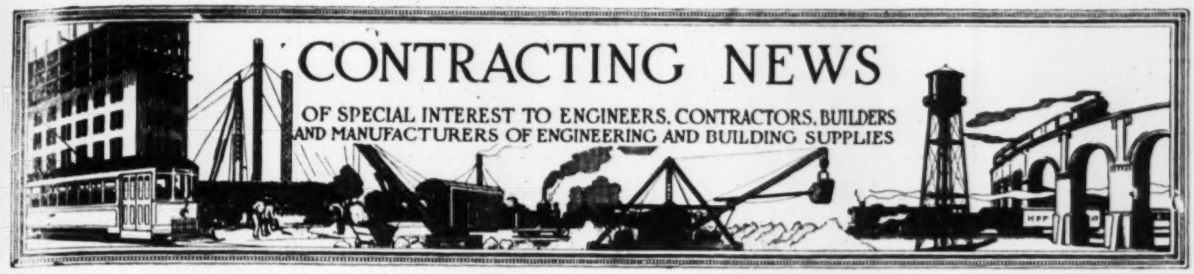


CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 62 to 65 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Oct. 22.	Salem, N. J. Adv. Oct. 11.	Oct. 11
Oct. 29.	Portland, Ore.	Oct. 11
Nov. 7.	Tonawanda, N. Y.	Oct. 18

SEWERS

Bids Close		See Eng. News-Record
Oct. 22.	St. Paul, Minn.	Oct. 18
Oct. 22.	Scranton, Pa.	Oct. 18
Oct. 23.	St. Cloud, Minn.	Oct. 18
Oct. 25.	St. Joseph, Mich. Adv. Oct. 4.	Oct. 4
Oct. 26.	Lorain, O.	Oct. 18
Oct. 29.	Glendale, Ariz.	Oct. 18

BRIDGES

Bids Close		See Eng. News-Record
Nov. 2.	Richmond, Va. Adv. Oct. 18.	Oct. 18
Nov. 6.	Oswego, Kan. Adv. Oct. 18.	Oct. 18
Nov. 6.	Dallas, Tex. Adv. Oct. 11 and 18.	Oct. 11
Nov. 6.	Little Falls, Minn.	Oct. 18

STREETS AND ROADS

Bids Close		See Eng. News-Record
Oct. 22.	St. Paul, Minn.	Oct. 18
Oct. 22.	Dallas, Tex.	Oct. 18
Oct. 22.	West New York, N. J.	Oct. 18
Oct. 23.	Connecticut Adv. Oct. 18.	Oct. 18
Oct. 23.	Ohio	Oct. 18
Oct. 23.	Santa Cruz, Cal.	Oct. 18
Oct. 23.	Jersey City, N. J.	Oct. 11
Oct. 24.	Paterson, N. J.	Sept. 27
Oct. 24.	Michigan	Oct. 18
Oct. 24.	Santa Barbara, Cal.	Oct. 4
Oct. 24.	Cleveland, O.	Oct. 18
Oct. 25.	Newark, N. J.	Oct. 18
Oct. 26.	Indiana	Oct. 11
Oct. 26.	Rhode Island Adv. Oct. 18.	Oct. 18
Oct. 27.	Indiana	Oct. 11
Oct. 29.	Indiana	Oct. 11
Oct. 29.	Highland Park, N. J. (New Brunswick P. O.)	Oct. 18
Nov. 5.	Pikeville, Ky.	Sept. 27
Nov. 5.	Kansas City, Kan.	Oct. 18
Nov. 5.	Coffeeville, Miss. Adv. Oct. 18.	Oct. 18
Nov. 5.	Fayetteville, W. Va.	Oct. 18
Nov. 6.	West Orange, N. J.	Oct. 18
Nov. 6.	Indiana	Oct. 11
Nov. 6.	Morgantown, W. Va. Adv. Oct. 11.	Oct. 11
Nov. 8.	Pennsylvania Adv. Oct. 18.	Oct. 18

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Oct. 22.	Crete, Ill.	Oct. 18
Oct. 23.	Athens, Ga.	Oct. 11
Oct. 23.	Mankato, Minn.	Oct. 18
Oct. 24.	Lesueur Center, Minn.	Oct. 4
Oct. 29.	Duluth, Minn.	Oct. 18
Nov. 1.	Papillion, Neb.	Oct. 16
Nov. 2.	Albany, N. Y. Adv. Oct. 11 and 18.	Oct. 11
Nov. 2.	Sibley, Ia.	Oct. 11
Nov. 9.	St. Cloud, Minn.	Sept. 27

BUILDINGS

Bids Close		See Eng. News-Record
Oct. 23.	Ft. Wayne, Ind.	Oct. 4
Oct. 23.	Smith Center, Kan.	Oct. 4
Oct. 23.	New York, N. Y. Adv. Oct. 11 and 18.	Oct. 11
Oct. 23.	Jersey City, N. J.	Oct. 18
Oct. 24.	Abilene, Kan.	Oct. 4
Oct. 24.	Brooklyn, N. Y.	Oct. 18
Oct. 25.	Sapulpa, Okla.	Oct. 18
Oct. 28.	Healdsburg, Cal.	Oct. 11
Oct. 28.	Denver, Colo.	Oct. 11
Oct. 29.	Trenton, N. J.	Oct. 18
Oct. 30.	Columbia, S. C.	Oct. 18
Oct. 31.	Davenport, Ia.	Oct. 18
Nov. 1.	Lawrence, Kan.	Oct. 18
Nov. 2.	Lakefield, Minn.	Oct. 18
Nov. 25.	Middletown, Mass.	Oct. 4
Dec. 1.	Norfolk, Va.	Sept. 13

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Oct. 20.	Experimental Sheet Rolling Mill — Washington, D. C.	Oct. 11
Oct. 20.	Tank and Towers — Key West, Fla.	Oct. 11
Oct. 22.	Power House and Machine Shop — New London, Conn.	Oct. 11
Oct. 22.	Heating System—Philadelphia, Pa.	Oct. 11
Oct. 22,	Emergency Hospital — Gulfport, Miss.	Oct. 18
Oct. 22.	Bridge — Farmington, N. M.	Oct. 18
Oct. 23.	Post Office — Andalusia, Ala.	Sept. 20
Oct. 24.	Post Office — Bakersfield, Cal. Adv. Sept. 20 and 27.	Sept. 20
Oct. 26.	Post Office — Mt. Carmel, Ill.	Sept. 20
Oct. 28.	Post Office — Waterloo, N. Y.	Sept. 20
Oct. 29.	Buildings—El Cayey, P. R.	Oct. 11
Oct. 29.	Buildings—Grand Isle, La. Adv. Oct. 11.	Oct. 11
Oct. 30.	Metal Work, etc. — Key West, Fla. Adv. Sept. 6 and 13.	Sept. 6
Oct. 30.	Post Office—Farmville, Va.	Sept. 27
Oct. 31.	Power House — Brooklyn, N. Y.	Oct. 4
Oct. 31.	Post Office—Hollidaysburg, Pa. Adv. Oct. 4.	Oct. 4
Oct. 31.	Levee Work — St. Louis, Mo.	Oct. 18
Nov. 1.	Lookout—Omaha, Neb. Adv. Oct. 11.	Oct. 11
Nov. 1.	Post Office—Kenton, O.	Sept. 27
Nov. 1.	Construction Materials — Detroit, Mich. Adv. Oct. 4.	Oct. 4
Nov. 2.	Maneuver Boats — Cincinnati, O. Adv. Oct. 4 to 18.	Oct. 4
Nov. 2.	Post Office — Valparaiso, Ind.	Oct. 4
Nov. 5.	Post Office — Burlington, N. C.	Oct. 4
Nov. 6.	Bridge—Towaoc, Colo.	Oct. 18
Nov. 7.	Buildings — Elbowoods, N. D.	Oct. 18
Nov. 8.	Levee Work — Vicksburg, Miss. Adv. Oct. 18.	Oct. 18
Nov. 8.	Piers, etc.—Detroit, Mich. Adv. Oct. 11.	Oct. 11
Nov. 9.	Post Office—Forsyth, Ga.	Oct. 11
Nov. 13.	Post Office—Harrisonville, Mo.	Oct. 11
Nov. 14.	Post Office—Austin, Tex.	Oct. 11
Nov. 15.	Canals—El Paso, Tex. Adv. Oct. 18.	Oct. 18
Nov. 16.	Maneuver Boats — Wheeling, W. Va. Adv. Oct. 18.	Oct. 18
Nov. 19.	Fitting out Cranes—Washington, D. C.	Oct. 18
Nov. 20.	Post Office—Caribou, Me.	Oct. 18
Nov. 28.	Post Office — Bellefourche, S. D.	Oct. 11

MISCELLANEOUS

Bids Close		See Eng. News-Record
Oct. 23.	Pier—New York, N. Y. Adv. Sept. 27 to Oct. 18.	Sept. 27
Oct. 30.	Elevated Railway—Philadelphia, Pa. Adv. Oct. 18.	Oct. 18
Oct. 30.	Fire Escapes — Dover, N. J. Adv. Oct. 18.	Oct. 18
Nov. 15.	Flood Control—Dayton, O. Adv. Sept. 13 to Oct. 18.	Sept. 13

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., Herkimer—City plans to build 30,000,000-gal. reservoir as part of new water-works system. L. Wood, city engr.

N. Y., Mt. Kisco—Village sold $13,500 bonds for water-works system. G. E. Janum, supt.

N. Y., Olean—City lets contract about Oct. 20, building filtration plant, including 1-story brick pumping station, 2,500,000-gal. capacity per day. About $75,000. E. H. Atwood, c/o Vacuum Oil Co., engr. Noted July 5.

N. Y., Rochester — City plans $75,000 bond issue to improve water-works system. F. T. Elwood, city engr. Noted Sept. 27.

N. Y., Westfield—Boro. lets contract about Oct. 21 rebuilding water-works system, including small concrete dam, 1 mi. concrete tunneling, wood stave pipe and c.-i. pipe. About $80,000. C. C. Hill, boro. engr., Gannet, Seelye & Fleming, 204 Locust St., Harrisburg, cons. engrs. Noted July 5.

Pa., Halifax—Boro. passed ordinance authorizing $16,000 bond issue to build water-works plant.

Ga., Atlanta—City plans election to vote on $250,000 bond issue to purchase and install new pumps at water-works. R. M. Clayton, city engr.

Water-Works (Continued)

Ga., Chamblee—City having plans prepared by J. B. McCrary & Co., engrs., 3rd Natl. Bank Bldg., Atlanta, for water-works and sewerage systems. J. W. Walker, mayor.

Ga., Dublin—City plans to issue $60,000 bonds to improve water-works system. M. J. Guyton, supt.

Ga., Savannah—(Official)—City defeated election for $500,000 bonds to rehabilitate water-works system. Noted Sept. 20.

Tenn., Lebanon — (Official) — City soon lets contract improvements to water-works system, including concrete stack, 5½ x 150-ft., air compressors, water pumps, shaker grates, etc. About $10,000. D. R. Moore, city engr.

O., Springfield—City Comn. passed ordinance appropriating $11,600 to repair Todd pump at water-works pumping station. M. J. Bahin, city engr.

Ind., South Bend—Council passed ordinance to issue $40,000 bonds to build water-works system. F. J. Anderson, city engr.

Mich., Holly—Village voted $20,000 bonds for water-works system. W. M. Smith, village pres. Noted Sept. 13.

Ill., Antioch—City lets contract about Oct. 21, for purification plant. H. L. Emerson, 133 West Washington St., Chicago, engr.

Ia., Riverside—City plans to build water-works system. About $40,000. J. M. Lewis, supt. parks and pub. property.

Minn., Brainerd—City having plans prepared by L. P. Wolff, engr., 1000 Germania Life Bldg., St. Paul, water-works improvements, including drilling new wells and about 8 mi. 4- and 6-in. c.-i. pipe.

Kan., Eureka—City receiving bids about Nov. 1 for water-works improvements. Cost $30,000. Black & Veatch, 507 Inter-State Bldg., Kansas City, Mo., engrs. Noted Aug. 16.

Kan., Galena — City having plans prepared by Burns & McDonnell, engr., 402 Inter-State Bldg., Kansas City, Mo., for filtration plant; $100,000 bond issue recently voted for work. Noted Sept. 27.

Tex., Quanah—City plans to build water-works system, including pumping plant. About $150,000.

Okla., Bristow—City having plans prepared by Benham Eng. Co., engrs., Colcord Bldg., Oklahoma, for extensions to water-works and sewerage systems; $20,000 bonds voted for work. Noted Aug. 2.

Okla., Indianapolis—City voted $15,000 bonds to build water-works system.

Okla., Tulsa—City lets contract about Nov. 1 to extend water-works system, including 40,000 tons 6-in. to 24-in. pipe, 1 12,000-gal. and 1 8000-gal. pump and 4,000,000-gal. filtration plant. About $675,000. C. M. Stevens, 708 Ridge Arcade, Kansas City, Mo., engr. Noted June 21.

Okla., Wapanucke—(Official)—City lets contract about Nov. 1 for water-works system. Cost, $14,000. W. J. Terry, chn. bd. city comrs. Noted Oct. 11.

Okla., Waurika—City having plans prepared by McIntosh-Walton Co., engrs., 1023 State Natl. Bank Bldg., Oklahoma, for water-works system; $20,000 bond issue voted for work. Noted Sept. 13.

Idaho, Du Bois—City having plans prepared by Cotton & Wilson, engrs., for installing water-works system. About $25,000.

Cal., San Fernando—City election soon to vote on $130,000 bond issue for water-works system, including 2,000,000-gal. reservoir, new distributing system, 8 12-in. riveted steel pipe, 6-in. c.-i. pipe, and 16-in. rein.-con. pipe. A. L. Sondregger, Central Bldg., Los Angeles, engr.

BIDS DESIRED

N. Y., Tonawanda—(Official)—Until Nov. 7, by U. W. Suison, city clk., for laying intake pipe in Niagara River. About $111,000. B. Hinkey, city engr. Noted Oct. 4.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Johnstown—(Official)—City let contract storage reservoir, earthern dam, spillway and appurtenances on Center Creek, to Hydraulic Constr. Co., Flower Bldg., Annex, Watertown, $99,482. Noted Sept. 13.

Pa., Polk—(Official)—Bd. Trustees of State Institution for Feebleminded of Western Pennsylvania, received low bid rapid sand filter plant and motor driven centrifugal pumps in connection with water supply, from Pittsburgh Filter Mfg. Co., Farmer's Bank Bldg., Pittsburgh. Noted Sept. 20.

★O., Dayton—(Official)—City let contract rein.-con. reservoir in southeastern part of city to Davies-Hunt, 1st and Webb Sts., $133,842. Noted Sept. 27.

★Wis., Oshkosh—Diamond Match Co. let contract for pumping station at plant to W. Oeflein, 86 Michigan St., Milwaukee, $250,000.

Minn., St. Cloud—City received low bids for 271 tons 8- 12-in. pipe for water-works system from Amer. Cast Iron Pipe Co., 385 Dearborn St., Chicago, $54.95 per ton; lead to be used in laying pipe from U. S. Cast Iron Pipe and Fdry. Co., 122 South Michigan Ave., Chicago; hydrants from Fairbanks Co.

★N. D., Minot—City let contract building water mains on several streets to G. W. Krinfer, Minot, $10,000.

★Tex., El Paso—City let contract furnishing, erecting and connecting complete triplex or centrifugal pump driven by fuel oil or electric motor, to furnish 600-gal. water per minute, to R. E. Huthsteiner, 923 Mills St., $14,087. Noted Oct. 4.

★Okla., Red Rock—(Official)—Bd. Trustees let contract water-works system to N. S. Sherman Machine & Iron Wks., 18-32 East Main St., Oklahoma, $22,000. Noted Aug. 2.

★Okla., Shamrock — City let contract water-works system to N. S. Sherman Machine & Iron Wks., 18-32 East Main St., Oklahoma, $37,800. Noted Sept. 13.

★Okla., Wilburton — City let contract water-works system to McEachin Bros., McAlester. $24,000. Noted Aug. 16.

★Cal., Santa Barbara—City let contract building Mission Ridge Reservoir to A. L. Pendola, 1332 Garden St., $51,112. Noted Oct. 11.

SEWERS

Proposed Work

Me., Portland—City plans sewers in Forest Ave. and East Deering St. About $440,000. E. M. Hunt, city engr.

Conn., Greenwich—(Official)—Boro. rescinded election to vote on $350,000 bond issue for sewerage system and sewage disposal plant in Sound Beach Sect. Work has been postponed indefinitely. Noted Sept. 13.

Conn., Stratford—City rejected bids for 11 mi. 8- to 30-in. pipe sewers, sewage disposal plant, etc. Noted Sept. 20.

N. Y., Olean—City having plans prepared for sewer in Higgins Ave., including 500 ft. 8- 10-in. pipe. About $14,000. E. E. Allen, city engr.

N. J., Edgewater—Boro. to sell $270,000 bonds Oct. 23 to build sewers. P. F. O'Brien, clk.

Pa., Johnstown—City election Nov. 6th to vote on $500,000 bond issue to build sanitary sewers. J. R. Crissey, city engr.

Pa., Milton—Boro. had plans prepared by A. Potter, engr., 50 Church St., New York City, for sewage disposal plant.

Pa., South Bethlehem—Boro. election soon to vote on $55,000 bond issue to build sewers and improve streets. M. Brady, boro. engr.

Md., Annapolis — Anne Arundel Co. Comrs. soon lets contract sewerage system in Linthicum Heights and Glen Burnie. A. Hayman, co. engr.

Ga., Chamblee—See "Water-works."

O., Dayton—City plans to build sanitary sewers in Districts. Nos. 8 and 10; also sidewalks on portions Valley St. F. O. Eichelberger, city engr.

O., Lebanon—City rejected bids for auxiliary sanitary sewerage system. Election Nov. 6 to vote on bonds for sewage disposal plant. R. E. Klein, Callahan Blk., Dayton, engr. Noted Aug. 23.

O., Massilon—City plans sewers in portions Walnut, Kent, and Green Sts. H. McYost, city engr.

O., Toledo—Comrs. Lucas Co. plan to build sanitary sewers Nos. 45, 47 and 1330, in Ohio main sewer districts Nos. 4 and 6. G. Cooper, aud.

O., Uhrichsville—Uhrichsville and Dennison Villages had plans prepared for sewage disposal plant and sanitary sewerage system. G. Arnold, 114 South Bway., New Philadelphia, engr. About $50,000.

Ind., La Fayette—City having plans prepared for storm sewers. About $250,000. H. B. Overesch, city engr.

Ill., Bradley—Village to issue $25,000 bonds to build sewerage system.

Ill., Moline—City had plans prepared 6-ft. storm drain system on 1st St. to be in conjunction with Rock Island system. About $25,000. L. Payton, city engr.

Ill., Quincy—City having plans prepared for sewerage system, about 4 mi. long. E. R. Chatten, city engr.

Ia., Riverside—City plans sewerage system; main sewer to be 2 mi. long. About $15,000.

Minn., Waseca—City having plans prepared by L. P. Wolff, engr., Germania Life Bldg., St. Paul, sewage treatment plant, including 7000 ft. 15-in. pipe. About $25,000. Noted July 12.

Kan., Hutchison—City soon lets contract sewerage system. About $70,000. E. Metz, city clk. Noted July 12.

Tex., Austin—City defeated $225,000 bond issue to install Imhoff tank-trickling filter plant and $50,000 for storm sewers and paving. Noted Sept. 27.

Okla., Hobart—(Official)—City has retained Benham Eng. Co., engrs., Colcord Bldg., Oklahoma, to prepare plans for water-works system. About $100,000.

Okla., Sand Springs—(Official)—City had plans prepared by Benham Eng. Co., Colcord Bldg., Oklahoma, for extending sanitary and storm sewerage systems. Election soon to vote on $40,000 bond issue for project.

Okla., Wynnewood—(Official)—City having plans prepared by McIntosh-Walton Co., engrs., 1023 State Natl. Bank Bldg., Oklahoma, for sanitary sewerage system. About $16,000. Noted Oct. 4.

Ariz., Flagstaff—City received no bids for building sewerage system. New bids in spring. Noted May 3.

Wash., Seattle—Streets and Sewers Com. having plans prepared by A. H. Dimock. city engr., improving 22nd Ave. et al, with sewers. About $56,933.

Cal., Los Angeles—Council passed ordinances to build sanitary sewers in portions 63rd and 65th Sts. and Bonsello Ave. A. C. Hansen, city engr.

Ont., Colchester South—Council passed bylaw to build storm drains. About $10,000. J. H. Madill, city clk.

Ont., London—Bd. Control plans to authorize the appropriation of $100,000 for storm sewerage system extensions during 1918. H. A. Brazier, city engr.

BIDS DESIRED

Pa., Scranton—(Official)—Until Oct. 22, by W. G. Robertson, dir. dept. pub. wks., for storm sewers on West Market, Winona, and Leggett Sts.; also grading portions Wheeler Ave. W. Shunk, city engr.

O., Lorain—(Official)—Until Oct. 26, by Dir. Pub. Serv., for sewers in portions Allison and Park Aves., Lake View Blvd., including 4335 ft. 6- 15-in. pipe, 22 manholes, etc. C. M. Osborn, city engr. Noted Sept. 13.

Minn., St. Cloud—(Official)—Until Oct. 23, by City for 4200 lin.ft. 72-in. segment block and 4000 lin.ft. 36-in. segment block or vitr. pipe sewer. About $85,000. R. E. Borrowman, city engr. Noted Sept. 27.

Minn., St. Paul—(Official)—Until Oct. 22, by H. W. Austin, purch. agt., storm-water sewer in portions Fairview Ave. and Lawrence St. O. Claussen, city engr. Noted Oct. 11.

Ariz., Glendale—Until Oct. 29, by H. G. White, town clk., for sewerage system. F. N. Holmquist, Phoenix, engr. Noted Oct. 4.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn—L. H. Pounds, boro. pres., let contract sewage pumping station, superstructures for sewers, and appurtenances to Frymer & Hanna Co., 25 West 45th St., New York City, $45,837. Noted Sept. 27.

★S. C., Columbia—City let contract 23,000 ft. vitr. pipe sewer to Chattanooga Sewer Pipe Wks., foot of Gillespie St., $10,637. Noted Oct. 4.

★O., Cleveland—City let contract installing sewer in Scarsdale Ave., to W. P. Gibbons Constr. Co., 340 Leader-News Bldg., $13,393; in East 171st St., to Gould & Maybach, 823 East 150th St., $7698. Noted Sept. 20.

Sewers (Continued)

O., Cuyahoga Falls—(Official)—Village received low bids for Gotel Ave. lateral sewerage system, including 7500 cu.yd. earth excav., 300 cu.yd. rock trench excav., 22 manholes and 2 mi. 6- 12-in. sewer pipe, from C. L. Wright, Mt. Vernon, $16,846; Gessner Co., Toledo, $17,063; F. R. George Co., Pittsburgh, Pa., $18,441. Noted Sept. 27.

Mich., Detroit—City received low bid for Linwood Ave. sewer in Lawton, Longfellow and Linwood Aves., about 15,617 ft. long, from Jeynes & Affeld, 1208 Ford Bldg., $644,687.

Mich., Grand Rapids—City received bids constructing southwest sewerage system as follows: Sects. Nos. 1 and 4, Vander Weele Bros., No. 2, McDermott & Cooper; No. 3, Ver Hey & Kloet; for entire system, A. H. Prange, Grand Rapids, and Moreno-Burkham Constr. Co., Syndicate Trust Bldg., St. Louis, Mo. These 2 contractors offered proposition to build sewer for cost plus percentage basis. Estimated cost, $180,546. Noted Oct. 4.

★Ill., Antioch—City let contract for sewage disposal plants and sewers to C. M. Porter & Co., 111 West Washington St., Chicago, $19,229.

Wash., Spokane—City received low bid building 4th Ward trunk sewer in Dist. No. 5, from Heikia, Miller & Paulson, Spokane, $11,400. Noted Sept. 20.

Cal., San Diego—City received low bids rein.-con. double compartment storm drain, 16th and Logan Sts., from Holland Constr. Co. [illegible]2 Granger Bldg., $22,888, and T. C. Bierenstein, Pasadena, $23,921.

★Cal., San Francisco—City let contract for Lake St. outlet sewer to H. Lotzin, $22,[illegible]00.

Cal., Upland—City received low bids for interior sewerage system, including 32,800 ft. 8- 10-in. vitr. sewer pipe, from E. L. Fleming & Sons, Pomona, $26,675, outfall sewer including 21,280 ft. 12- 14-in. vitr. pipe, from J. Chutuck, 532 South Matthews St., Los Angeles, $24,118. Noted May 10.

BRIDGES

Proposed Work

Ia., Algona—(Official)—Kossuth Co. rejected bids building bridge over Des Moines River. Noted Sept. 27.

Mo., Independence—(Official)—Kansas City Southern Ry. soon lets contract for rein.-con. viaduct over North River Blvd. J. M. Weir, Kansas City, Mo., ch. engr. Waddell & Son, 934 Wyandotte St., Kansas City, Mo., engrs., prepared plans.

Tex., Ft. Worth—City Comn. plans to build rein.-con. viaduct over railroad yards, Jennings Ave. F. J. Von Zuben, city engr.

Okla., Holdenville—Hughes Co. sold $25,000 bonds for bridge improvements in Newburg Twp. A. J. Johnson, co. clk. Noted Sept. 27.

Okla., Waurika—See "Streets and Roads."

BIDS DESIRED

Conn., Hartford—See "Streets and Roads."

Va., Richmond—(Official)—Until Nov. 2, by City, building rein.-con. viaduct over Bacon Quarter Branch and Seaboard Air Line Co.'s property. C. E. Bolling, city engr.; advertised in this issue.

Minn., Little Falls—Until Nov. 6, by Morrison Co., building Royal Mississippi River Bridge, 2 130-ft. and 1 140-ft. truss spans. B. Y. McNairy, co. aud.

Kan., Oswego—(Official)—Until Nov. 6, by Labette Co. Comrs., building 7 rein.-con. bridges. W. J. King, co. engr.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Albany—(Official)—W. W. Wotherspoon, supt. pub. wks., Capitol, let contract building bascule bridge below Lock No. 1, Culvert St., Phoenix, Oswego Canal, Sect. 1, Barge Canal Contract No. 167, to W. S. Rae, Oliver Bldg., Pittsburgh, $29,689. Noted Sept. 6.

★Pa., Pottstown—(Official)—Montgomery Co., Norristown, and Chester Co., West Chester, let contract repairing Hanover St. bridge over Schuylkill River, to Pittsburgh Constr. Co., Diamond Bank Bldg., Pittsburgh, $32,000. Noted Oct. 11.

★Ark., Texarkana—(Official)—Bd. Comrs. Red River Bridge Dist. let contract building bridge over Red River, near Index, to Midland Bridge Co., Kansas City, Mo. About $275,000.

★Cal., Los Angeles—See "Streets and Roads."

STRUCTURAL STEEL WORK

Bids Desired

Conn., Hartford—See "Bridges."

REINFORCED CONCRETE

Proposed Work

N. J., Newark—See "Industrial Works."

O., Cleveland—See "Miscellaneous."

Tex., Ft. Worth—See "Bridges."

BIDS DESIRED

Conn., Hartford—See "Bridges."

Va., Richmond—See "Bridges."

Kan., Oswego—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—See "Industrial Works."

★N. Y., Hudson—See "Miscellaneous."

★O., Dayton—See "Water-Works."

Cal., San Diego—See "Sewers."

STREETS AND ROADS

Proposed Work

Me., Alfred—York Co. plans building bituminous macadam road from here to Old Orchard.

N. Y., Buffalo—Bd. Pub. Wks. plans to pave portion Main St., asphalt. G. H. Norton, city engr.

New Jersey—State Highway Comn., Trenton, plans to improve road leading to Camp Merritt, Tenafly, 2½ mi. R. A. Meeker, state highway engr.

N. J., Cape May—Cape May Co. to sell $22,000 bonds Nov. 8 to improve roads. F. W. Fowkes, Sea Isle City, clk.

N. J., Freehold—Monmouth Co. plans hard surfacing 13 mi. road from here to Keyport; also improving Norwood Ave., Long Branch. G. D. Cooper, Red Bank, co. engr.

N. J., Jersey City—City plans improving portion Gates Ave., from Old Bergen Rd. to New Jersey Central R.R. bridge. C. A. Van Kuren, city engr.

N. J., North Bergen—(Weehawken P. O.) Town plans to pave Traphagen St. About $10,000. F. J. Harmon, engr.

N. J., Paterson—Passaic Co. plans to improve Main St. About $200,000. G. Ferguson, co. engr.

N. J., Trenton—City and Pennsylvania R.R. plans to extend Passaic St., over Delaware and Raritan Canal. About $40,000. A. Swan, city engr. A. C. Shand, Broad St. Sta., Phila., ch. engr. ry.

Pa., Bellevue—City plans paving, grading and curbing portions Florence and South Jackson Aves.

Pa., Pittsburgh—City plans widening and extending portion Howard, Alger and Eshelman Sts. R. Swan, city engr.

Del., Milford—City Council plans resurfacing 2½ mi. streets, tarvia. G. M. Townsend, clk.

Md., Baltimore—City plans to pave 25 to 30 mi.; sheet asphalt, including 85 streets and 30 alleys. About $1,000,000. C. Rowland, chn. paving comn.

N. C., Kinston—Lenoir Co. Comrs. plan 2-mi. concrete pavement on Central Highway from Lenoir to Caswell Training School. About $30,000. Natl. Highway Comn. to appropriate $10,000 toward cost.

S. C., Charleston—Charleston Co. voted $275,000 bonds to improve roads. Noted Sept. 13.

Ga., Darien—McIntosh Co. Comrs. plan to issue $55,000 bonds; part of proceeds will be used for road work.

Fla., Lake City—Columbia Co. voted $500,000 bonds to hardsurface roads. Noted Sept. 20.

Fla., Perry—City voted $90,000 bond issue to pave streets.

Fla., Quincy—(Official)—City voted $18,000 bonds to pave streets. Noted Oct. 4.

Fla., Zolfo—City plans laying 1 mi. brick pavement, 34 ft. wide. R. C. Peterson, clk.

Ala., Gadsden—City plans to pave portions 6th and 12th Sts., asphaltic concrete. About $30,000 and $11,000, respectively. R. M. Wilbanks, clk.

Ala., Geneva—Geneva Co. election soon to vote on $100,000 bond issue to improve, repair and extend 100 mi. roads.

O., Bowling Green—(Official)—J. E. Shatzel, secy. bd. trustees, Bowling Green State Normal College, rejected bids for 3500 sq.yd. paving and 10,000 sq.yd. concrete walks and grading. New bids in spring. Noted Sept. 13.

O., Cincinnati—City Council rejected bids to resurface and widen Freeman and Seegar Aves. New bids. F. Krug, city engr. Noted Sept. 20.

O., Dayton—See "Sewers."

O., Lima—City plans to pave portion Atlantic Ave. C. Bryson, city engr.

O., Van Wert—Van Wert Co. having plans prepared by T. K. Priddy, engr., 89.8 mi. macadam roads. About $102,900. W. Klein, aud.

O., Youngstown—City plans paving portions Worthington and Thurman Sts. F. M. Lillie, city engr.

Indiana—State Highway Comn., Indianapolis, plans to build 5 main market highways through state making total of about 800 mi. The routes selected are as follows: Rd. No. 1, beginning at Illinois and Indiana state line, westerly through Dyer, Valparaiso, Laporte, South Bend, Goshen and Ft. Wayne via Lincoln Highway; No. 2, beginning at Illinois and Indiana State line, easterly through Terre Haute, Brazil, Putnamville, Plainfield, Indianapolis, Greenfield, Knightstown, Cambridge City and Richmond to Ohio and Indiana State line; No. 3, beginning at Indiana and Michigan State line, southerly through South Bend, Plymouth, Rochester, Peru, Kokomo, Westfield, Carmel, Indianapolis, Franklin, Columbus, Seymour, Scottsburg, Sellersburg, New Albany and Jeffersonville; No. 4 crossing southern part of state beginning at Evansville, easterly through Boonville, Huntington, Jasper, Dillsboro, Aurora and Lawrenceburg to Ohio and Indiana State line; No. 5, road connecting Vincennes and Mitchell, via Wheatland, Washington, Loogootee and Shoals. W. S. Moore, state highway engr.

Ind., Brazil—Comrs. Clay Co. plan to pave National Rd. from western limits of city to Vigo Co. line. Cost about $20,000 per mi. State Highway Comn. will appropriate $25,000 toward work.

Ind., Danville—Hendricks Co. sold $12,600 bonds to build highways.

Ind., Indianapolis—City plans to improve and pave portions Yandes, Capitol, Eastern Bway., McCarty, Noble, Pleasant and Julian Sts. B. T. Jeup, city engr.

Mich., Grand Rapids—City had plans prepared paving portions Butterworth St., asphaltic concrete. About $32,300. J. C. Shinkman, clk.

Mich., Marshall—Calhoun Co. Rd. Comrs. plan road to Camp Custer, brick, asphalt or asphaltic concrete. Cost between $25,000 and $50,000 per mile.

Ill., Bloomington—McLean Co. plans to issue $2,000,000 bonds to improve roads. W. Schmidt, chn.

Ill., Freeport—(Official)—Stephenson Co. lets contract about Jan. 1, State aid highway, 10-ft. brick and 3-ft. macadam shoulder. About $23,442. P. G. Hiveley, Springfield, co. supt. highways. Noted Oct. 11.

Ill., Peoria—City Council plans paving Washington St., monolithic brick and cement walks on Franklin St. About $21,000. L. D. Jeffries, city engr.

Ill., Sullivan—Moultrie Co. plans election Oct. 30 to vote on $145,000 bond issue for improving road from Rockford city limits via Cherry Valley to Boone Co. line.

Wisconsin—State Highway Comn., Madison, plans Wisconsin River highway from Grand Rapids to Nekoosa via Port Edwards across Nekoosa River to New Rome.

Ia., Ottumwa—(Official—River Front Comn., Phoenix Trust Bldg., plans to build 60-ft. boulevard; first section will be about 6700 ft. long. C. A. Wellman, chn.

Kan., Atchison—City plans paving portion 4th and U Sts. and Kansas Ave. F. S. Altman, city engr.

Kan., Wichita—City plans to pave portion Holyoke Ave., Lewis and Bluff Sts. A. Brockway, city engr.

Neb., Omaha—City plans to improve 22nd and 24th Sts., and 25th Ave., also grade portions Dodge St. and St. Marys Ave. J. A. Bruce, city engr.

North Dakota—State Highway Comn. Bismark, having plans prepared by P. W. Thomas, asst. state highway engr., for 19 mi. Federal Aid road.

Streets and Roads (Continued)

Mont., Butte—City created Impvt. Dist. No. 3 and plans to build sidewalks and grade streets. About $40,215. J. J. Armstrong, city engr.

Mo., Kansas City—City plans to pave portion Jackson and Lawn Aves. and 34th St.; artificial stone sidewalks on east side of Delaware St.; also curbing portion Jackson Ave. and 59th St. C. Hill, city engr.

Mo., St. Louis—City plans to widen Washington Ave. between Jefferson and Grand Aves. About $15,000. E. R. Kinsey, pres. bd. pub. serv.

Ark., Clarksville — Johnson Co. Comrs. plan to build macadamized road from Pope Co. to Franklin Co. line. About $140,000.

Ark., De Witt—Arkansas Co. Comrs. had plans prepared by State Highway Comn., Little Rock, building road from Stuttgart to Goldman, 6 mi., tarvia penetration. About $60,000.

Ark., Jonesboro — (Official) — Craighead Co. Comrs. let contract about November building brick and asphaltic concrete highway in Jonesboro-Nettleton Rd. Impvt. Dist. Klyce & Kackley, Life and Casualty Bldg., Nashville, Tenn., engrs. Noted Aug. 16.

Ark., Lewisville — Lafayette Co. Comrs. plan to build 22 mi. gravel road from Columbia Co. line through Buckner, Stamps and Lewisville, to Red River. About $100,000.

Ark., Morrillton—Conway Co. had plans prepared by State Highway Dept., Little Rock, for road from Mero to Van Buren Co. line, 33 mi., to be part of highway from Hot Springs to Mammoth Springs. About $65,000.

Ark., Mt. Ida—Arkansas Natl. Forest appropriated $5,334,200 to improve Caddo Valley Rd.

Ark., Van Buren—Crawford Co. Comrs. plan to build road from here to Ft. Smith thence to Boston Mt. at Winslow.

Texas—State Highway Comn. had plans prepared Dallas-El Paso Highway, 701 mi. long. About $1,025,241. G. A. Duren, state highway engr.

Tex., Colorado—Mitchell Co. election Nov. 1 to vote on $70,000 bonds to build roads.

Tex., Dallas — Dallas Co. Comrs. rejected bids resurfacing portion Richardson Rd. from Vickery to Richardson, Maple Ave. Rd. from city limits to railroad crossing and California Crossing Rd. J. F. Witt, co. engr. Noted Sept. 13.

Tex., El Paso—City election Oct. 31 to vote on $100,000 bond issue to pave street and alley intersections. G. Espy, city engr.

Tex., Ft. Worth—City Comrs. and Tarrant Co. Comrs. plan to resurface Arlington Heights Blvd. from 7th St. viaduct to center of Camp Bowie.

Tex., Linden—State Atty. General's Dept., Austin, approved issue of $75,000 bonds in Cass Co. for good roads in Dist. No. 3, and $30,000 for roads in Dist. No. 2.

Tex., Palestine—Anderson Co. election soon to vote on $40,000 bond issue to build good roads in Tennessee Colony and Cayuga Communities.

Tex., Sweetwater—Nolan Co. election Nov. 10 to vote on $100,000 bond issue to build roads.

Okla., Ada — (Official) — City plans to pave residential districts. About $100,000. Benham Eng. Co., 300 Colcord Bldg., Oklahoma, engrs.

Okla., Bristow—City having plans prepared by Benham Eng. Co., engrs., Colcord Bldg., Oklahoma, for paving streets. About $75,000.

Okla., Holdenville—Hughes Co. sold $73,000 bonds for road improvements. A. J. Johnson, co. clk. Noted Sept. 27.

Okla., Waurika—Jefferson Co. election soon to vote on $25,000 bond issue to build roads and bridges in Wray Twp.

Idaho, Albion—Cassia Co. voted $100,000 bond issue for road work in Burley.

Idaho, Burley — (Official)—City election Oct. 2 to vote on $42,000 bond issue for paving and other improvements deferred indefinitely. E. C. Davis, clk. Noted Sept. 27.

Oregon — State Highway Comn., Salem, plans building Columbia River Highway from here to The Dalles and through the gorge, 16.6 mi. About $320,000.

Ore., Gold Beach—(Official)—Curry Co. lets contract about May for road from Coos Co. to California state line. Noted Oct. 11.

Ore., Toledo—Lincoln Co. at recent election defeated $200,000 bonds for road work. Noted Sept. 27.

Wash., Seattle—City rejected bids paving Beacon Ave. A. H. Dimock, city engr. Noted Oct. 11.

Wash., Seattle—City having plans prepared paving alleys in Pettit and Brown addition. About $24,064. A. H. Dimock, city engr.

Cal., El Segundo—City voted $540,000 bonds to improve streets and build city hall.

Cal., Fresno—City plans to improve portion Franklin Ave. B. E. Cronkite, city engr.

Cal., Los Angeles—City plans to improve 10th, 66th and Andrews Sts. A. C. Hanson, city engr.

Ont., Chatham—City plans to pave portions 7th St., and remove sidewalk on Sheldon Ave. J. W. Adams, city engr.

BIDS DESIRED

Rhode Island—(Official)—Until Oct. 26, by State Bd. Pub. Rds., Providence, building section state highway in South Kingstown; advertised in this issue.

Connecticut—(Official)—Until Oct. 23, by C. J. Bennett, state highway comr., Capitol, Hartford, building roads and rein.-con. and steel bridges in various twps.; advertised in this issue.

N. J., Highland Park—(New Brunswick P. O.)—Until Oct. 29, by Boro., concrete sidewalks throughout boro. R. B. Craig, clk.

N. J., Newark—(Official)—Until Oct. 25, by Bd. Street and Water Comrs., flagging 4200 ft. cement walks, 5 in. thick on Ave. A, 3500 ft. Ave. B, 12,200 ft. Miller St., 5400 ft. Wright St. M. R. Sherrard, city engr.

N. J., West New York — (Weehawken P. O.)—Until Oct. 23, by Town, repaving 9th and Jefferson Sts. About $20,000.

N. J., West Orange—(Official)—Until Nov. 6, by City, paving portion Valley Rd., including 10,175 sq.yd. grouted granite on 6-in. concrete base. About $40,000. C. Winston, city engr. Noted Oct. 11.

Pennsylvania—(Official)—Until Nov. 8, by State Highway Comn., Harrisburg, for road work in Allegheny, Venango, and Somerset Cos.; advertised in this issue.

Pa., Scranton—See "Sewers."

W. Va., Fayetteville—Until Nov. 5, by Fayette Co., grading road in Kanawha Dist., 3 mi. R. J. Stegall, clk. P. Konrad, Kanawha Falls, engr.

Miss., Coffeeville—(Official)—Until Nov. 5, by Bd. Superv., Yalobusha Co., 15 mi. paving; L. T. Whisdom, chancery clk.; advertised in this issue.

Tenn., Morristown—Until Oct. 26, by D. C. Morris, recdr., improving several streets including 5000 cu.yd. excava.; 7000 sq.ft. 16-ft. water-bound macadam paving, 7800 lin.ft. curb and gutter; 34,530 sq.ft. 4½-ft. sidewalk; 2230 sq.ft. concrete crossings; 40 lin.ft. 24-in. pipe; 30 lin.ft. 19-in. pipe; 1690 lin.ft. 15-in. pipe; 1200 lin.ft. 12-in. pipe; 200 lin.ft. 10-in. pipe; 14 catch basins and 7 manholes.

Ohio—(Official)—Until Oct. 23, by C. Cowen, state highway comr., Columbus, improving highway in Franklin Co., Sects. M. and O, Columbus-Sandusky Rd., brick on concrete base. About $12,429.

O., Cleveland—Until Oct. 24, by City, paving, grading, draining and curbing portion East 130th St. R. Hoffman, city engr.

Michigan—Until Oct. 24, by State Highway Comn., Lansing, building 7008 mi. water-bound macadamized road in Allegan Co., Ganges Twp.

Minn., St. Paul—(Official)—Until Oct. 22, by H. W. Austin, purch. agt., grading portions Lake Como, Phalen, Cleveland, Maplewood and Hamline Aves., and certain alleys; also curbing portion Edmund St. O. Claussen, city engr.

Kan., Kansas City — (Official) — Until Nov. 5, by Wyandotte Co. Comrs. repaving Parallel Rd., 2½ mi.; Kaw Valley Rd., 5½ mi. macadam. About $30,000. O. K. Williamson, co. engr. Noted Oct. 4.

Tex., Dallas — (Official) — Until Oct. 22, by C. E. Gross, aud., Dallas Co., grading and graveling portions Rowlette Rd.; also resurfacing portion Seagoville Rd.

Cal., Santa Cruz—Until Oct. 23, by F. H. Miller, clk. Santa Cruz Co., improving 6-mi. highway between Santa Cruz and Felton.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—City received low bid grading and playground surfacing at Smith's Pond playground, from T. H. Connolly, 2 Harland St., Roxbury, $19,500.

★Conn., Hartford—City let contract, cement concrete pavement to W. T. Ryan, 129 Barker St., $15,000. City will furnish all materials.

N. Y., Brooklyn—(Official)—L. H. Pounds, boro. pres., received low bids regulating and paving Hopkinson Ave., permanent asphalt pavement on 6-in. concrete base, from Sicilian Asphalt Paving Co., 41 Park Row, New York City, $21,793; Borough Asphalt Co., 1301 Metropolitan Ave., $22,461; Cranford Co., 52 9th St., $22,739. Noted Oct. 4.

N. Y., Long Island City—M. M. Connolly, boro. pres., received low bids paving (a) portions Hughes St., sheet asphalt, 6-in. concrete foundation, (b) Hancock St., from Sicilian Asphalt Paving Co., 41 Park Row, New York City, (a) $10,475; (b) $11,681; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (a) $10,655; (b) $11,882; Uvalde Asphalt Paving Co., 1 B'way., New York City, (a) $10,836; (b) $12,083. Noted Sept. 27.

N. Y., Mineola—Nassau Co. received low bids improving Shore Rd., Port Washington, from Smull & Dusinberry, Port Washington, $14,821; Andrews Bros., $15,045.

N. Y., New York—D. Matthewson, boro. pres., received low bids paving portions roadway of Bronx and Pelham Pkway., sheet asphalt, concrete foundation, from Union Paving Co., 120 Bway., $58,900; Uvalde Asphalt Paving Co., 1 Bway., $61,146; Davney Asphalt Co., 52 Vanderbilt Ave., $64,299.

★N. Y., Norwich—City let contract bitulithic pavement to Warren Bros. Co., 142 Berkeley St., Boston, $20,000.

Pennsylvania — State Highway Dept., Harrisburg, received low bids for road work, (a) Cambria Co., East Taylor Twp., Route 52, Sect. 4-0, 9878 ft. vitr. block pavement 16 ft. wide, (b) Cambria Co., Jackson and East Taylor Twps., Route 52, Sect. 4-B, 11,070 ft. vitr. block pavement, 16 ft. wide, (c) Lackawanna Co., Moosie and Old Forge Boroughs, State-aid applications Nos. 487-442; 6562 ft. rein.-con. pavement, 16 ft. wide, (d) Washington Co., Cecil and North Strabane Twps., Route 108, Sect. 1, 19,318 ft. vitr. block and rein.-con. pavement, 16 ft. wide, (e) Allegheny Co., South Fayette Twp., Route 108, Sect. 1, 16,852 ft. vitr. block and rein.-con. pavement, 16 ft. wide, (f) Lehigh Co., Hanover Twp., Route 159, Sect. 1, 11,857 ft. rein.-con. pavement, 16 ft. wide to 20½ ft., (g) Butler Co., Clinton Twp., State-aid Application No. 417, 5800 ft. vitr. block pavement, 16 ft. wide, (h) Westmoreland Co., East Huntingdon Twp., State-aid Application No. 324, 2540 ft. vitr. block pavement 16 ft. wide, (i) Montgomery Co., Upper Moreland, Abington and Upper Dublin Twps., State-aid Application No. 648, 6537 ft. rein.-con. pavement, 16 ft. wide, (j) Venango Co., Cornplanter Twp., State-aid Application No. 681, 7857 ft. vitr. block pavement, 16 ft. wide; (k) Washington Co., East Bethlehem Twp., Route 268, State-aid Application No. 738, 5900 ft. vitr. block and rein.-con. pavement 16 ft. wide; from E. H. Brua, Hollidaysburg, Pa., (a) $78,855, (b) $96,520; J. L. Elder, Center St., Ebensburg, Pa., (a) $79,624, (b) $95,882; R. Hopkins, Troy, N. Y., (a) $80,752, (f) $76,838; Mainwaring & Cumins, Inc., Phila., (b) $109,890, (i) $50,652; Gibbons & Buckley, Phila., (c) $25,499; Matthias & Stipp & Son, Scranton, (c) $27,642; O'Brien Bros., Division St., Avoca, Pa., (c) $32,309; P. F. Connelly, Reality Bldg., Elmira, N. Y., (d) $165,140; R. Swan, Jenkins Arcade, Pittsburgh, (e) $210,721, (g) $64,105; G. B. Hardner, Lentz Bldg., Allentown, Pa., (f) $69,375; J. C. Bentley, Elizabeth, N. J., (f) $72,858; N. J. Boyer, Butler, Pa., (g) $30,256; Kennedy Contr. Co., Utica, N. Y., (g) $34,730; R. Gallardi, Connellsville, Pa., (h) $20,955; Ambler, Davis Co., Harrison Bldg., Phila., (i) $44,350; Juniata Co., Empire Bldg., Phila., (i) $45,511; E. M. Love & Son, Corry, Pa., $56,663; Crossan Constr. Co., High St., Brownsville, Pa., (k) $75,322.

★Pa., Bradford—City let contract paving Sherman and Washington Sts., brick, to J. B. Sheenan, $18,000.

Streets and Roads (Continued)

★**Pa., Ellwood City**—City let contract paving portion 9th St. and Border Ave. to A. Dahl, Ellwood City. About $12,380.

★**Pa., Pittsburgh**—Allegheny Co. let contract road work to Booth & Linn, Ltd., 3785 Bway., New York City, East Carson St. extension in St. Clair Boro., Baldwin Twp. and Hays Boro., 13,050 ft., $351,630; Irwin Run Sect. connecting Hays Boro., and Mifflin Twp., 9100 ft., $161,275; Rhinehart Bros., Puckey Rd., Plum Twp., 10,300 ft., $15,883; T. Cronin Co., South 17th and Muriel Sts., Hope Hollow Rd., Scott Twp., 4330 ft., $56.225; Steuben St. extension, Chartiers Twp., 1650 ft., $29,962; Dravosburg Sect. of Irwin Run and West Run connecting road, Mifflin Twp. and Dravosburg Boro., 8900 ft., $143,665; Noblestown Rd., Greentree Boro. and Chartiers Twp., 5900 ft., $86 701; Noblestown Rd. (Dinsmore Sect.), Westwood Boro. and Chartiers Twp., 6150 ft., $44,845; Frankstown Ave., Penn Twp., 3150 ft., $40.650; Spring Garden Rd., Reserve Twp., 6525 ft., $94,175; D. W. Challis & Sons, 420 Centennial Bldg., Bakerstown and Warrendale Rd., Pine Twp., 7600 ft., $83,468; M. W. Ott Co., 414 Warrington Ave., Idlewild Rd., Chartiers Twp., 2700 ft., $38.056; Mattern Ave., Mt. Lebanon Twp., 1900 ft., $27.303; D. McNeil Co., Jenkins Arcade, Butler Pike, Shaler Twp., 17.300 ft., $115,990; Freeport Rd., Sect. No. 2, Harmar and O'Hara Twps., 8050 ft., $99,144.

★**W. Va., Charleston**—City let contract paving several streets and alleys to Central Eng. Co., Charleston. About $58,688. Noted Oct. 11.

★**Louisiana**—(Official)—State Highway Dept., New Orleans, let contract following highway work: Baton Rouge-New Orleans Rd., Ascension Parish, 27.48 mi.; Lafayette-New Iberia, Lafayette-Crowley Rds., Lafayette Parish, 12 2 mi., to S. A. Davis, Jackson, Miss., $86,875. Noted Oct. 4.

★**La., Minden**—City let contract 8 blocks brick paving to Kennedy, Olson Constr. Co., 601 Ridge Arcade Bldg., Kansas City, Mo.

Ohio—State Highway Comn. Columbus received low bids improving highways as follows: Ashland Co., Sect. "A." Columbus-Wooster Rd., monolithic brick, 1:54 mi., Wilson Constr. Co., Newark, $43.718; A. C. Solomon Constr. Co., Lima, $44.012. Clermont Co., Sect. "N-1" Milford-Hillsboro Rd., water-bound macadam, 0.98 mi., John Reubel Constr. Co., Cincinnati, $11.317; H. C. Lamb, Amelia, $11,378. Darke Co., Sect. "A-1," Dayton-Greenville Rd., concrete, 2:63 mi.; York & Studebaker, Greenville, $59.495; Straw & Huber, Pauling, $62,342. Huron Co., Sect. "L." Bellevue-Norwalk Rd., monolithic brick, 2.40 mi., Chris Stoltz, Bellevue, $40,744; R. L. Greenslade, Bellevue, $42 015. Knox Co., Sect. "K." Columbus-Wooster Rd., rein.-con., 1.61 mi., Latshaw & Stinchcomb, Fostoria, $47,431; H. W. Curry & Co., Eaton, $47.986. Lucas Co., Sect. "J" Toledo-Napoleon Rd., waterbound macadam, 4.48 mi.; Gray Bros., Bowling, $72,003. Mahoning Co., Sect. "B." Youngstown-Lowellville Rd., brick, 1.5 mi.; Smith Constr. Co., $53,791. Seneca Co., Sect. "A." Tiffin-Fostoria Rd., bituminous concrete, 1.55 mi.; Modern Constr. Co., Fremont, $40.448. Summit Co., Sect. "R." Akron-Canton Rd., brick, 2.08 mi.; J. L. McCormick, Canton, $64 501. Summit Co., Sect. "N-1," Cleveland-Massillon Rd., brick, 1.80 mi.; W. E. Burke & Sons, Akron, $57 853. Wayne Co., Sect. "Q." Wooster-Canal Dover Rd., monolitic brick on concrete foundation, 1.17 mi., Holmes Constr. Co., Millersburg, $23.479; McGary & Stowe, Akron, $23.823. Wayne Co., Sect. "A." Wooster-Millersburg Rd., monolithic brick on concrete foundation, 0.88 mi.; McGary & Stowe, Akron, $16.074; Holmes Constr. Co., Millersburg, $16.074; Sect. "A." Orrville-Southern Rd., monolithic brick on concrete base, 2.35 mi.; Holmes Constr. Co., Millersburg, $53,131; bituminous macadam, Baum & Ankeny, Sycamore, $48.284; Seiple & Wolfe, Youngstown, $48.465. Williams Co., Sect. "L." Bryan-Pioneer Rd., waterbound macadam, 3.81 mi., Doan & Langenderfer, Toledo, $54.992; H. M. Kelly, Bryan, $57.756; bituminous macadam, Doan & Langenderfer, Toledo, $67.120; H. M. Kelly, Bryan, $69.260. Jefferson Co., Sect. "N-2." Steubenville-Cambridge Rd., resurfacing with brick on concrete foundation, 1.83 mi.; Andrew McDonald, Steubenville, $71.918; resurfacing with brick on rolled base, $65,830. Noted Oct. 4.

★**O., Akron**—City let contract paving and stone curbing on various streets to McAlonan Bros., $19,971. Noted Oct. 4.

★**O., Elyria**—City let contract paving five streets to Elyria Constr. Co., Elyria. About $38,655. Noted Sept. 27.

★**Ill., Champaign**—City let contract paving portion Chandler St., to H. K. Rhoades & Co., Lincoln, Neb., $28,000.

★**Ill., Decatur**—(Official)—City let contract improving North Jasper St. to File & Alexander, 315 Milliken Bldg., $25,253.

★**Ill., Mendota**—(Official)—City let contract brick pavement, 5-in. concrete foundation and cement grout filler, to H. Zalper & Sons, Mendota, $33,470. Noted Sept. 27.

★**Ia., Des Moines**—City let contract paving 34th and Forest Sts., bitulithic, to J. Horrabin & Co., 2d and New York Aves., $2.84 per sq.yd.

★**Ia., Oskaloosa**—Hahaska Co. let contract grading North Market St., also streets and avenues in Penn addition to J. Herbert & Sons, Marshalltown. About $10,000.

★**Kan., Augusta**—City let contract, paving various streets to A. Jaicks Co., Amer. Bank Bldg., Kansas City, Mo., $28,000.

★**Mo., Charleston**—(Official)—City let contract paving, curbing and guttering to A. R. Young & Co., Lawrence, Kan. About $80,000. Noted Sept. 27.

★**Mo., Springfield**—(Official)—Green Co. received no bids to improve 15-mi. road in Galloway Special Rd. Dist. Work will be done by day labor. Noted Oct. 4.

★**Tex., Dallas**—City let contract paving to Texas Bitulithic Co., 1106 Praetorian Bldg., Grand St., $19,768; Washington Ave., $35,474; Kinney Ave., $24,687; Gaston Ave., $16,630.

Tex., Galveston—City received low bids filling in crest in boulevard between 34th and 39th Sts., mudshell, from Hanson & Son, Galveston, $0.95 per cu.yd.; W. D. Hadden, 1814 Amer. Natl. Insurance Bldg., $1.27; Freund & Freund, 211 23rd St., $1.45 per cu.yd. Noted Oct. 4.

★**Tex., Plainview**—City let contract 100,000 yd. brick pavement to J. N. Jordan, Plainview, $200,000.

★**Okla., Okmulgee**—City let contract paving streets to Ok-Park-Moran Co., Okmulgee, $22,965.

★**Idaho, Moscow**—City let contract 38,000 sq.yd. bituminous pavement to Asphalt Paving Co., 517 Lincoln St., .054c. sq.yd., furnishing Torpedo sand, 30c. cu.yd. of 2500 lb. f.o.b. at pit in Spokane.

★**Utah, Provo**—Utah Co. Comrs. let contract paving road between America Fork and Pleasant Grove, 2 mi., cement and rein.-con., 18 ft. wide, 4 ft. rolled shoulder on each side, to Strange & McGuire, Utah Savings and Trust Bldg., Salt Lake City, $39,000. Noted Sept. 13.

★**Utah, Salt Lake City**—(Official)—City let contract Paving Extension No. 138 to Strange-Maguire Pav. Co., Utah Savings & Trust Bldg., $10,961. Noted Sept. 13.

★**Nev., Elko**—Elko Co. let contract 6 mi. highway in Jarbidge Canyon to W. Harkins, $18,500.

★**Washington**—State Highway Comn. let contracts paving Pacific Highway, in Clarke Co., 3½ mi., to A. Rydstrom, Tacoma, $44,989; in Skagit Co. to J. R. Wood, Seattle, $36,838; Olympia Highway, between Olympia and Kalmilchie, 3½ mi., to Alfred & James, Centralia, $43 385; Navy Yard Highway, from Charleston to Clinton, D. Govan, Port Angeles, $78,007; Sunset Highway, from Wilbur west 4 mi. and from Govan west 8 mi., to G. L. Stickler, Uniontown, $14.394 and $20.955 respectively; State Rd. No. 22, 6 mi. from Myers Falls south in Stevens Co., to A. L. Mitchell, Spokane, $29,254. Noted Sept. 20.

★**Wash., Walla Walla**—Walla Walla Co. let contract building Inland Empire Highway from Dayton, north, to C. N. Pentecost, Walla Walla. About $32,978.

★**Cal., Hanford**—Bd. Supervs. King Co. let contract River Bend unit of highway system, involving 6000 cu.yd. excav., 515,500 sq. ft. asphaltic concrete, Topeka surface, to Blanchard-Brown Co. About $46,000. Noted Sept. 13.

★**Cal., Los Angeles**—City let contract paving Reseda Ave. to G. H. Oswald, O. T. Johnson Bldg., $139.662. Noted Oct. 11.

★**Cal., Los Angeles**—City let contract regrading and oiling Sherman Dr. and building rein.-con. bridge over Pacific Electric tracks, to W. M. Ledbetter, Pacific Electric Bldg., $24.845. Noted Oct. 11.

Cal., San Diego—City received low bid furnishing 13,500 bbl. cement for building highway from city limits to Camp Kearney, from Golden State Portland Cement Co., Marsh-Strong Bldg., Los Angeles, $1.53 per bbl., net, f.o.b. San Diego.

★**Cal., Taft**—City let contract paving, curbing and building sidewalks to Federal Constr. Co., Sharon Bldg., San Francisco. About $58,849. Noted Sept. 13.

Cal., Visalia—Tulare Co. received low bids for county highway system from Highway Constr. Co., Exeter-Merryman Rd., $72,603; Brady & Flinn, Humboldt Bank Bldg., San Francisco, Porterville-Woodville Rd., $124,971; Isbell Constr. Co., Dinuba-Kingsburg Rd. $84,127; J. E. Lee, Tulare-Paige Rd. $60,801. Noted Sept. 27.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Kansas—Joplin & Pittsburg Ry., 1st Natl. Bank Bldg., Pittsburg, made preliminary surveys for 2 mi. line from Waco into mineral fields between Waco and Lawton. W. A. Satterlee, genl. mgr.

Washington—Seattle Municipal Ry., 517 County and Citizens Bldg., Seattle, plans to extend city car lines by connecting Lake Burien and Division A lines. Project includes elevated railway on Washington and Spokane Sts., Railroad and Whatcom Aves., extending from 1st Ave. S., to the West Waterway. About $350,000. A. L. Valentine, supt.

California—Municipal Ry. of San Francisco, 2600 Geary St., received franchise from Bd. Supervs. for building new line from west portal of Twin Peaks Tunnel to 20th and Taraval Sts. Bd. Supervs. appropriated $90,000 toward cost. T. A. Cashin, supt.

British Columbia—Canada Copper Corp., Princeton, will spend about $1,000,000; greater part of sum for building railroad from Copper Mountain to Princeton, to serve mines of company.

EXCAVATION AND DREDGING

Proposed Work

N. Y., Albany—(Official)—Ditch—W. W. Wotherspoon, supt. pub. wks., received no bids for improving Erie, Oswego and Champlain Canals. Barge Canal Contract No. 163. Noted Sept. 13.

Ind., Winslow—Dredging—J. S. Spiker, engr., Vincennes, submitted report to Circuit Court Pike Co., Petersburg, estimating cost straightening Patoka River at or near Winslow, west to just above Townsend rock quarry. Work involves cutting 43 mi. wanderings by little river down to 17 mi., thus taking out many kinks; at one point a meandering of 14 mi. will be replaced by 4-mi. straight dredge. About $409,001.

Ill., Lawrenceville—(Official)—Ditch—Lawrence Co. Comrs. received no bids, rebuilding 6 mi. old ditch, involving 50,000 cu.yd. excav., also 2 mi. new ditch, involving 72.000 cu.yd. excav. as contractors claimed estimate was too low. G. C. Harvey, Mt. Carmel, engr. Noted Oct. 4.

Minn., Minneapolis—Ditch—Hennepin Co. had plans prepared for open ditch, involving 3-mi. main ditch, 10-ft. bottom, 3 open laterals, 50,000 cu.yd. excav. Address W. H. Nicol, secy., 303 South 3rd St. W. R. Hoag, 623 14th Ave., S. E., engr.

Neb., Hastings—Drainage—Bd. Supervs. Adams Co., plans to reclaim Kernan Lagoon. Work involves releasing of 473 acres and drainage project to cost about $15,000. County to appropriate ¼ of cost, property owners, ¾.

Utah, Widtsoe—Irrigation—Emery Valley and Reservoir Co. plans to raise company's dam on east fork Sevier River to irrigate 20,000 acres. About $70,000.

Ore., Gold Hill—(Official)—Ditch—Gold Hill Irrigation District receiving bids about Jan. 1, building irrigation ditch. Bonds for $60,000 voted for work. G. B. Alden, pres.

Cal., Alameda—Dredging—Southern Pacific Co. plans to dredge channel along its seawall. About $150,000.

BIDS DESIRED

Ill., Crete—Drainage—Until Oct. 22, by Comrs. Deer Creek D.D. No. 3, furnishing, hauling, digging ditch, laying and back filling, 18.977 ft. 6- to 18-in. No. 1 shale tile. S. Rose, town clk. E. Schrage, comr.

Minn., Duluth—Ditch—Until Oct. 29, by St. Louis Co., building Co. Ditch No. 11, Canosin region, involving 43,116 cu.yd. excav., 79 cu.yd. rock grading, etc. About $10,869. Noted Sept. 20.

Excavation and Dredging (Continued)

Minn., Mankato — Ditch — Until Oct. 23, by Blue Earth Co., building Co. Ditch No. 53, involving 25,230 ft. 10- to 24-in. tile. About $14,180. R. H. Allison, co. engr.

Neb., Papillion—Drainage—Until Nov. 1, by Western Sarpy D.D., building 7¼ mi. open ditches, 2½ mi. levee, tile and brush jetties in river. About $33,463. J. H. Langdon, Gretna, secy. dist. H. D. Patterson, Papillion, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Albany—Canal—W. W. Wotherspoon, state supt. pub. wks., received low bids for Contract No. 83, completing canal at Tonawanda and removing guard lock and cofferdam near Sulphur Springs, from Mohawk Dredge & Dock Co., Inc., Herkimer, $216,915; Contract No. 164, completing and building canal at certain locations between Lyons and Newark also for retaining dam at Macedon, from Lathrop, Shea & Henwood Co., Ellicott Sq., Buffalo, $159,848; Mohawk Dredge & Dock Co., Herkimer, $228,947. Noted Sept. 13.

N. Y., Albany—(Official)—Canal—W. W. Wotherspoon, supt. pub. wks., received low bids, electrical equipment and operating machinery for Utica Terminal Lock, Barge Canal Contract No. 15-M, from Lupfer & Remick, Ellicott Sq., Buffalo, $36,967; Lord Constr. Co., 105 West 40th St., New York City, $49,100. Noted Sept. 13.

★Minn., Mankato—(Ditch)—Blue Earth Co. let contract building Judicial Ditch No. 22 to Riese & Hall, Eagle Lake, $13,000.

INDUSTRIAL WORKS

Proposed Work

Mass., Fitchburg—Manning, Maxwell & Moore, 100 Bway., New York City, plans steel rolling mill here. About $500,000.

Mass., New Bedford—Union St. Ry., 814 Purchase St., soon lets contract for 80 x 115-ft. power station, brick, concrete, and steel, on Middle St. About $665,000. H. M. Hopes, 185 Devonshire St., Boston, archt.

N. Y., Brooklyn—Midwood Building Co., 44 Court St., having plans prepared by Cantor & Dorfman, archts., 373 Fulton St., 2-story, 80x100-ft., brick and steel garage. About $50,000.

N. Y., Buffalo—Standard Mirror Co., 1168 Seneca St., plans 2-story, 200 x 400-ft. brick and steel factory, 141 Milton St. W. La Hodney, pres.

N. Y., Gloversville—D. Hays Co., 185 West Fulton St., having plans prepared by Comstock & Van Dreser, archts., 29 West Fulton St., 3-story, 40x180-ft. brick factory. About $60,000.

N. Y., Hague — Foxon Graphite Co., Hague, plans new plant. About $300,000.

N. Y., New York—T. J. McCahill, 45 East 42d St., had plans prepared by C. W. Culgin, archt., 15 Broad St., for 6-story, 75 x 98-ft. garage at 144-48 East 41st St. About $130,000.

N. Y., New York—B. Mathonn, 17 East 37th St., had plans prepared for 6-story, 50x50-ft. brick garage, 112 East 32nd St. About $100,000.

N. J., Newark—J. Oschwald, 185 Bigelow St., plans 2-story, 65 x 239-ft. rein.-con. service station. Plane and Hackett Sts. About $55,000.

Pa., East Pittsburgh—Westinghouse Electric & Mfg. Co., having plans prepared by Prack & Perrine, archts., 803 Keystone Bldg., Pittsburgh, 165 x 241-ft. foundry. About $50,000.

Pa., Middletown—Lanzius Aircraft Co., 149 Bway., New York City, plans factory here. About $250,000. E. W. Bloomingdale, chn. bd. dirs.

Pa., Phila.—Ft. Mifflin Shipbuilding Co., Widener Bldg., plans to incorporate with $10,000,000 capital stock and build plant on Delaware River. A. Masters, Montclair, N. J., pres.

Pa., Phila.—White Motor Car Co., 842 East 79th St., Cleveland, had plans prepared by J. W. Watson & Co., engrs., Leader News Bldg., Cleveland, 1- and 2-story, 210x270-ft. service building, 20th St. and Erie Ave. About $325,000. W. T. White, pres.

Pa., Pittsburgh—Atlantic & Pacific Tea Co., 825 East 141st St., New York City, had plans prepared by Ballinger & Perrot, archts., 17th and Arch Sts., Phila., for garage and warehouse. About $300,000. A. Brooks, 32 Terminal Way, mgr.

N. C., Kinston—A. J. Chesson Mfg. Co. plans plant for manufacture of farm implements. About $50,000. A. J. Chesson, pres.

Miss., Meridian—City election Nov. 2 to vote on $150,000 bond issue to build ice plant. J. C. Watts, city engr.

La., New Orleans—Wilson & Co., Constance and St. Joseph Sts., secured site on river front and plans to build new packing plant. About $2,000,000. W. D. Cooper, mgr.

Tenn., Jackson—Illinois Central Ry. plans to build store and oil house; some of buildings to be 1-story, 37 x 175 ft. and others 2-story, 37 x 72 ft. About $50,000. A. S. Baldwin, Chicago, ch. engr.

O., Cleveland — National Lamp Works plans warehouse and factory, 1131 East 152nd St. About $160,000. G. H. Johnson, archt.

O., Massillon—A. M. McCarty, of Canton, and associates, plan iron and steel plant on North Summit St., here. About $1,000,000.

O., Westerville—Culver Superior Glass Co., recently organized, plans to build bent glass factory. About $100,000. W. D. Shaw, pres.

O., Youngstown — Automatic Sprinkler Co., Brittain St., has purchased 1-acre site and had plans prepared for addition to plant. About $50,000.

O., Zanesville—City sold $100,000 bonds to build market house. Noted Aug. 23.

Ill., Chicago—Ehman Tire & Rubber Co., 144 West 27th St., had plans prepared by Dibelka, Flake & Minchin, archts., 130 North 5th Ave., for 3-story addition to its factory. About $50,000. A. C. Ehman, pres.

Ill., Chicago—Shank & Co., 30 North La Salle St., plans 5-story brick warehouse, 3950-58 Federal St. About $200,000. Wheelock & Shont, 64 W. Randolph St., Arch.

Ill., Cicero—Chicago, Burlington & Quincy R.R., Chicago, plans 1-story, 41x121-ft. machine shop at Clyde Sta. About $60,000. G. B. Harris, Chicago, ch. engr.

Ill., Madison—Tri-City Steel Co., 2021 Railway Bldg., St. Louis, Mo., recently incorporated with $1,000,000 capital stock, plans to purchase 8½-acre site and build rolling mill. About $100,000. J. A. Hyle, gen. supt.

Ia., Atlantic—Waterloo Creamery Co., 1617 Howard St., Omaha, Neb., plans 2-story, 50x100-ft. brick creamery. About $50,000. R. Corliss, pres.

Minn., Duluth—Marshall Wells Hardware Co., Lake Ave., plans to build factory. About $70,000.

Colo., Pueblo — Norcross Chemical Co. has purchased site of 120 acres and plans to build factory.

Idaho, Nampa—Nampa Milk Co., Nampa, plans 2-story, 88x200-ft. condensary. About $100,000.

Wash., Tacoma—Alber Bros., 821 Dock St., plans improvements and additions to plant, situated on city waterway. About $80,000.

Ont., Sarnia — Romeo Fdry. Co., Port Huron, Mich., plans foundry at Christina and Exmouth Sts., for manufacture of automobile castings. About $200,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Boston Wharf Co. let contract 8-story, rein.-con. warehouse, 369 Congress St., to W. F. Kearns Co., 240 Albany St., Cambridge.

★Pa., Allenport—Pittsburgh Steel Products Co., Frick Annex Court, Pittsburgh, let contract 1-story tube mill to Wilson Constr. Co., Fulton Bldg., $75,000.

★Pa., Phila. — Philadelphia Electric Co., 10th and Chestnut Sts., let contract power plant, Beach and Palmer St., to Stone & Webster Co., 147 Milk St., Boston, $8,000,000.

★Pa., Phila. — (Tacony) — Tacony Ordnance Co., Commercial Trust Bldg., let contract new plant, including 1-story openhearth shop, 1-story machine shop, 1-story forge shop and 1-story treating plant to F. W. Marks Constr. Co., Finance Bldg., $450,000.

★Pa., Phila.—Unit Constr. Co. let contract building 1- and 3-story gun manufacturing plant, Gray's Ferry Ave. and 57th St., to J. N. Gill & Co., 1215 Filbert St. $80,000.

★Pa., Pittsburgh—Point Motor Sales Co. 56 Water St., let contract 3-story, [illegible] x 229-ft. garage, to D. T. Riffle, Keenan Bldg. $50,000.

★Ga., Brunswick—American Shipbuilding Co., 11 Bway., New York City, let contract 2-story mill and 2-story stock building to J. G. Conzelman, Brunswick. Noted Sept. 27.

★Tenn., Nashville—E. M. Bond Fireproof Storage Co., 211 3rd Ave., let contract 4-story storage warehouse to Foster & Creighton, $70,000.

★O., Akron—N. Loeser, 1533 East Blvd. Cleveland, let contract brick warehouse 152 Hill St., to Clemmer & Johnson, High and Church St. About $140,000.

★O., Cleveland—Natl. Lamp Co. Nela Park, East Cleveland, subsidiary of General Electric Co., let contract 3-story factory East 52nd St., to be known as Pitney Glass Works, to Heller Bros., Osborn Bldg. $400,000. Noted Sept. 20.

★O., Cleveland—J. A. Wigmore & Co. 1330 Williamson Bldg., let contract 2-story 108x220-ft. sales, service station and garage to Masters & Mullen Constr. Co. 601 Electric Bldg., $125,000.

★Ill., Chicago — Ames Steel Co. 2716 Farrell St., let contract 4-story, brick factory to J. Rodatz, 209 South La Salle St. $60,000.

★Ill., Chicago—Brennan Packing Co. 3916 Normal Ave., let contract 4-story, 65x150-ft. cold-storage building, 49th St. and Union Ave., to E. W. Sproul Co., 1120 West 35th St., $100,000.

★Colo., Denver—Linde Air Products Co. 217 West 29th St., New York City, let contract 1-story, 130x155-ft. factory to C. S. Lamble Co., 321 Tramway Bldg., $50,000 Noted May 17.

★Que., Montreal — Montreal Locomotive Wks. let contract factory to Structural Steel Co., 10 Cathcart St., $50,000.

★Ont., Hamilton—Canada Screw Co., 334 Wellington St., let contract addition to plant to W. H. Yates, 24 Leeming St. About $100,000. Noted Aug. 2.

BUILDINGS

Proposed Work

Mass., New Bedford—School—Bd. Educ. having plans prepared by F. C. Brown, archt., 667 Pleasant St., 2-story, brick, Emma and Freeman Sts. About $150,000.

Mass., Pittsfield—Hospital—House of Mercy, North St., plans, 2-story, 40x125-ft. About $50,000. J. McArthur Vance, 24 North St., archt.

N. Y., Albany—Club House—Young Men's Hebrew Assn. plans. About $80,000. H. Cohen, chn. bldg. com.

N. Y., Chenango—Hospital—Broome Co. Comrs. (Binghamton) had plans prepared by W. H. Whitlock, archt., Security Mutual Bldg., Binghamton, 2-story tuberculosis hospital. About $60,000. H. C. Williams, co. clk.

N. Y., New York—Store and Loft—R. H. Macy & Co., 6th Ave. 34th and 35th Sts., soon receives bids, 4-story, 25x75-ft. J. H. Scheier, 25 West 42nd St., archt. Noted Sept. 13.

N. Y., New York—Office—New Jersey Zinc Co., 55 Wall St., having plans prepared by H. J. Hardenburgh, archt., 47 West 34th St., 7-story, brick and stone.

N. Y., New York—Hospital—Volunteer Hospital having revised plans prepared by A. Mertin, archt., 34 West 28th St., 4-story, 75x80-ft. addition, Beekman and Water Sts. About $75,000. Gen. Ballington Booth, pres. Noted July 12.

N. Y., Rochester—Club—Knights of Columbus, c/o. Meng & Shefer, Powers Blk., having plans prepared by Gordon & Madden, archts., Sibley Bldg., 3-story, 90x200-ft. About $150,000.

N. J., Atlantic City—Home—Order of King's Daughters and Sons plans Home for Aged. About $75,000.

N. J., Glassboro—Normal School—State Bd. Educ. plans State Normal School here. About $300,000. J. P. Murray, Jersey City, pres.

Buildings (Continued)

N. J., Bayonne—Y. M. C. A., c/o. C. A. Towson, 124 East 28th St., New York City, having plans prepared by Shattuck & Hussey, archts., 19 South La Salle St., Chicago, brick. About $250,000.

N. J., Manville—Hotel—H. W. Johns-Manville Co., c/o. R. Newsome, Madison Ave. and 41st St., New York City, plans, 3-story, 150x150-ft. About $100,000.

N. J., Newark—Hospital—Bd. Dir. of the Mecca of Chopractic Hospital and Clinics of Drugless Physicians, plans, 4-story, 50 x 60-ft. Warren St. About $95,000.

N. J., Plainfield—Y. M. C. A. plans 4-story, 100x150-ft. building on Sycamore St. I. E. Jallade, 37 Liberty St., New York City, archt.

N. J., South Amboy—School—Bd. Educ. plans. About $85,000. J. E. Coogan, secy.

N. J., Trenton—Detention—State Hospital for Insane had plans prepared by F. H. Bent, state archt., State House, for 2-story addition. About $110,000.

Pa., Pittsburgh—Home—Curtis Home, Breckenridge Ave., plans addition. About $50,000.

Pa., Pittsburgh—Nurses' Home—St. Margaret's Memorial Hospital had plans prepared by T. E. Billquist, archt., Vandergrift Bldg., 4-story, 35x115-ft. E. J. Edsall, 265 46th St., supt.

O., Canton—Research—State plans Juvenile Research building on State Hospital grounds, West Broad St. About $100,000 available for work.

W. Va., Charleston—Home—A. E. Humphreys, 215 Coronado Bldg., Denver, Colo., plans Home for Aged. About $2,000,000.

La., Monroe—Court House and Jail—Ouachita Parish Police Jury having plans prepared. About $250,000.

O., Toledo—High School—Bd. Educ. to sell $200,000 bonds Nov. 1 to build South High School. L. I. Donat, clk.

Ind., Wishawaka—Hospital—St. Mary's Mercy Hospital soon lets contract, 3-story, 46x100-ft. About $120,000. H. Gaul, 111 West Washington St., Chicago, archt.

Mich., Benton Harbor — Church — St. Mathews Congregation had plans prepared by A. Dohman, archt., 1st Natl. Bank Bldg., Milwaukee, Wis., 1-story. About $50,000.

Mich., Detroit—Church—Beulah Baptist Congregation plans, Kercheval and McClellan St About $50,000.

Mich., Detroit—School—Bd. Educ. had plans prepared by Malcomson & Higginbotham, archts., 404 Moffat Bldg., for addition to school. About $50,000.

Wis., Milwaukee—School—Bd. Industrial Educ. plans, 7th and Prairie Sts. About $200,000.

Ia., Davenport—Hospital—St. Anthony Hospital having plans prepared by A. Dohman, archt., 1st Natl. Bank Bldg., Milwaukee, Wis., 5-story. About $250,000.

Ia., Manchester—Church—Congregational Church plans. About $78,000.

Ia., Menlo—School—Bd. Educ. having plans prepared by Proudfoot, Bird & Rawson, archts., 810 Hubbell Bldg., 2-story. About $70,000. J. W. Wilson, pres.

Ia., Sioux City—Office—Home Securities Co., Sioux City, plans, 12-story. About $80,000. P. H. Pilchard, pres.

Minn., Coleraine — High School — Bd. Educ. plans addition. About $75,000. W. T. Bray, Fidelity Bldg., Duluth, archt.

Minn., Dodge Center—Home—Dodge Co. plans, 2-story, 40x100-ft., brick, Home for Poor. About $50,000. Alden & Harris, 1011 Nat'l. Ex. Bank Bldg., St. Paul, archts.

Minn., Minneapolis—Y. M. C. A. plans building at University of Minnesota. About $160,000. E. C. Gale, 800 Security Bldg., chn. bldg. com.

Minn., Rochester—Hospital—Sisters of St. Francis plan addition to St. Mary's Hospital. About $500,000.

Minn., Rochester—Store and Hotel—Knowlton Realty Co., plans, 6-story, 110x140-ft., cut stone. About $275,000. F. H. Ellerbee, 381 Jackson St., St. Paul, archts.

Minn., St. Paul—Club—St. Paul Athletic Club, plans, 11-story, 100x112-ft., Redford cut stone and red brick. About $700,000. A. H. Stem, Oppenheim Bldg., archt.

Minn., St. Paul—Hospital—Chas. T. Miller Memorial Hospital receives bids about November 240x300-ft., Summit Ave. A. H. Ancker, 337 Wabasha St., chn. bldg. comn. C. H. Johnston, 715 Capital Bank Bldg., archt.

Neb., Allen—School—City voted $50,000 bond issue for schools.

Neb., Norfolk—Hotel—American Hotel Co. plans, 8-story, 75 x 80-ft., and 2-story, 4th St. and Norfolk Ave. About $300,000.

Neb., St. Paul—Community—City had plans prepared by G. A. Berlinghoff, archt., 911 Security Mutual Life Bldg., Lincoln, 3-story, 50x110-ft. About $50,000. F. A. Taylor, secy.

Mo., St. Louis—Clinic—Bd. Pub. Serv. soon receives bids, 4-story. About $190,000. A. R. Kensey, pres.

Tex., Houston — (Houston Heights) — School—Bd. Educ. plans to build 2 schools. About $100,000.

Tex., Orange—School—City plans election to vote on $75,000 bond issue to build addition to Anderson School. G. W. Curtis, secy. school bd.

Okla., Miami—Jail—County plans election Nov. 20 to vote on $50,000 bond issue for jail. W. P. McCullough, Ottawa, co. clk.

Okla., Pauls Valley—Court House and Jail—Garvin Co. plans election to vote on $150,000 bonds to build court house and jail.

Okla., Tulsa—Bank and Office—S. G. Kennedy, 205 Gallias Bldg., plans 10-story, 100 x 140-ft. addition to Kennedy Bldg., 4th St. and Boston Ave. About $500,000. A. W. Black & Son, Security Bldg., St. Louis, archts.

Wash., Olympia—High School—Bd. Educ. receiving bids about Dec. 1, 3-story, 140 x 150-ft. brick. About $100,000. Heath & Gove, archts., Natl. Realty Bldg., Tacoma, preparing plans.

Wash., Seattle—Loft—J. W. Goodwin, Pike Pl. Market, plans, 4-story, on 1st Ave. About $60,000.

Wash., Spokane—Infirmary—Spokane Co. Comrs. appropriated $80,000 for addition to Tuberculosis Hospital at Edgecliff. Noted Oct. 11.

Cal., El Segundo—City Hall—See "Streets and Roads."

Cal., Los Angeles — Hotel — D. A. and M. A. Hamburger and W. H. Clune, 528 South Bway., had plans prepared, 12-story, 160x248-ft., steel, brick and rein.-con., Bway. and 9th St. About $1,500,000.

Cal., Los Angeles—Office—H. J. Goudge, 622 Investment Bldg., plans, 9-story, 70x155-ft., rein.-con. and brick, on Spring St. Train & Williams, 226 Ex. Bldg., archts.

Cal., Los Angeles—Sanitarium—Western Episcopal Society, incorporated with $100,000 capital stock, plans to build here. About $500,000.

Cal., Vallejo—Schools—City election Nov. 16 to vote on $60,000 bond issue to build schools.

BIDS DESIRED

N. Y., Brooklyn—Armory—Until Oct. 24, by City, additions and alterations to armory buildings on 8th Ave. and 15th St. and Marcy Ave. and Hayward St. About $260,000. Pilcher & Tachau, 109 Lexington Ave., New York City, archts.

N. J., Jersey City—Hospital—Until Oct. 23, by City Comrs., for additions to City Hospital. F. A. Dolan, city clk. Noted July 5.

N. J., Trenton—Dormitory—Until Oct. 29, by F. H. Bent, state archt., State House, at School for Deaf.

S. C., Columbia—Jail—Until Oct. 30, by Newberry Co. J. M. Davis, chn. bldg. com.

Ia., Davenport—Schools—Until Oct. 31, by Bd. Educ., for 3 intermediate schools. J. D. McCollister, secy. Temple & Burrows, 63 Davenport Savings Bank Bldg., archts.

Minn., Lakefield—High School and Manual Training—Until Nov. 2, by Bd. Educ., 2-story, 51x70-ft., also 2-story, 61x96-ft., rein.-con. brick and tile. K. T. Snyder, 933 Plymouth Bldg., Minneapolis, archt. Noted Aug. 30.

Kan., Lawrence—Campus—Until Nov. 1, by C. H. Chandler, state archt., State House, Topeka, 3-story, 66x139-ft. and 26x240-ft. About $225,000. J. A. Kimball, Topeka, mgr. bd. administration.

Okla., Sapulpa—High School—Until Oct. 25, by Bd. Educ., 3-story, brick, stone and rein.-con. Cost between $175,000 and $200,000. J. W. Young, clk. C. A. Popkin, Berryhill Bldg., archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Greenwich—Nurses' Home—Greenwich Hospital let contract, 2-story, 67x85-ft., Williams St., to C. T. Willis, Inc., 286 5th Ave., New York City, $60,000.

★Conn., New Haven—College—Yale University let contract 10 buildings to M. Eidlitz & Son, 30 East 42nd St., New York City, $2,500,000.

Conn., Shelton—Infirmary—Tuberculosis Sanitorium received low bids, from A. Miller, 21 Church St., Meriden, $62;823; T. J. Pardy Constr. Co., 15 Fairfield Ave., Bridgeport, $66,474.

★N. J., Bayonne—Bd. Educ. let contract addition to School No. 11 to G. W. Cranwell & Son, Union St., West Hoboken, $50,000.

★N. J., Newark—Fire House—City let contract, 2-story, brick, to W. H. Connolly Co., Inc., 495 12th Ave. About $50,000. Noted Oct. 11.

★Pa., Bloomsburg—(Official)—Bank and Office—Columbia County Trust Co. let contract, 4-story, 24x120-ft., to E. H. Sheets, Ritter Bldg., Huntington, W. Va. Noted Oct. 4.

★Wash., D. C.—Bank—Dist. Nat. Bank let contract, 28 x 113 ft., granite and marble, G St., near 14th St., N. W., to W. P. Lipscomb & Co., 1405 F St., $150,000.

★O., Akron—School—Bd. Educ. let contract, Girard St., to Carmichael Constr. Co., 524 Hamilton Bldg., Akron, $250,000.

★O., Cleveland—Home—Montefiore Home for Aged and Infirm Israelites let contract, 170x216-ft., on Mayfield Rd., to R. Hansen, 1413 East 95th St. About $200,000. Noted July 12.

★Ill., Chicago—Theater and Store—T. F. Brett, 15 North Ashland Ave., let contract, 3-story, to Harris & Kusel, 707-110 South Dearborn St., $220,000.

★Wis., Hudson—High School—Bd. Educ let contract to W. Baumeister Co., St. Paul, Minn., $75,000.

★Minn., Kasson—High School—Bd. Educ. let contract, School Dist. No. 30, to Madsen & Peterson, Plymouth Bldg., Minneapolis. About $101,000. Noted Sept. 13.

★Neb., Clay Center—Court House—Clay County let contract to Olson & Johnson, 1236 1st Natl. Bank Bldg., Omaha. About $120,000. Noted Sept. 27.

★Mo., Kansas City—Nurses' Home—Christian Hospital, 27th and Paseo Sts., let contract 3-story, brick and rein.-con., to Swinson Constr. Co., Shubert Theater Bldg. About $75,000. Noted Oct. 11.

★Tex., Mineral Wells — Hotel — Crazy Hotel Co., Crazy Well Bldg., let contract addition to Van Horn & Martel, $10,000.

★Cal., Los Angeles—Mausoleum—California Mausoleum Co., Chamber of Commerce Bldg., Pasadena, let contract 32x143-ft., rein.-con., brick, granite, tile, marble, in Hollywood Cemetery, to W. C. Crowell, 440 Chamber of Commerce Bldg., Pasadena, $100,000.

★Ont., London — Hospital — Salvation Army let contract, brick and rein.-con., to R. G. Wilson, 193 College St. About $50,000.

FEDERAL GOVERNMENT WORK

Proposed Work

R. I., Newport — Extension to General Storehouse—Bureau Yards and Docks, Navy Dept., Wash., soon receives bids for extension to general storehouse, Naval Torpedo Sta. About $100,000.

N. Y., New York—Depot—Bureau Yards and Docks, Navy Dept., Wash., soon receives bids building Medical Supply depot. About $200,000.

Pa., Phila. — Heating System—Bureau Yards and Docks, Navy Dept., Wash., preparing plans for heating system for foundry. About $50,000.

Pa., Phila.—Marine Barracks, etc.—Bureau Yards and Docks, Navy Dept., Wash., preparing plans for marine barracks and mechanical equipment for clothing department at Quartermaster Dept. About $99,000.

Pa., Phila.—Tank and Tower—Bureau Yards and Docks, Navy Dept., Wash., soon receives bids for elevated steel tank and tower. About $20,000.

Federal Government Work (Continued)

Wash., D. C.—Aviation Camps—War Dept., Signal Corps, Wash., soon lets contract building 10 aviation camps; will probably be located in South Carolina, Florida, Oklahoma, and Illinois. Cost about $750,000 per unit.

Wash., D. C.—Retaining Wall—Bureau Yards and Docks, Navy Dept., soon receives bids building at Naval Hospital. About $40,000.

Va., Norfolk—Tower—Bureau Yards and Docks, Navy Dept., Wash., soon receives bids for 200-ft. steel tower. About $12,000.

La., New Orleans — Radio Buildings — Bureau Yards and Docks, Navy Dept., Wash., preparing plans. About $15,400.

P. R., El Cayey—Radio Towers—Bureau Yards and Docks, Navy Dept., Wash., cancelled advertisement for the building of 3 radio towers. Bids to have been opened Oct. 15. Noted Oct. 11.

BIDS DESIRED

Me., Caribou—Post Office—Until Nov. 20, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Wash., D. C.—Fitting-Out-Cranes—Until Nov. 19, by Bureau Yards and Docks, Navy Dept., Wash., for 3 electrically-operated fitting-out cranes of 350 gross ton capacity at Navy Yards, Norfolk, Va., New York and Philadelphia.

W. Va., Wheeling — Maneuver Boats — Until Nov. 16, by U. S. Engr. Office, Wheeling, furnishing and delivering 7 maneuver boats for Ohio River dams; advertised in this issue.

Miss., Gulfport—Emergency Hospital — Until Oct. 22, by Bureau Yards and Docks, Navy Dept., Wash., at Gulfport.

Miss., Vicksburg—Levee Work — Until Nov. 8, by 3rd Mississippi River Dist., P. O. Box 404, building about 1,000,000 cu.yd. levee work; advertised in this issue.

N. D., Elbowoods—Building—Until Nov. 7, by C. Sells, comr. Indian Affairs, Wash., D. C., building 1 office building, No. 14 at Ft. Berthold Indian Agency.

Mo., St. Louis—Levee Work—Until Oct. 31, by Secy. Mississippi River Comn., 1311 International Life Bldg., St. Louis, building 80,000 cu.yd. earthwork, Henderson Co. D.D. No. 1, Ill.

Tex., El Paso—(Official)—Canals—Until Nov. 15, by U. S. Rec. Serv., El Paso, building canals on Rio Grande Project. A. P. Davis, ch. engr., advertised in this issue.

Colo., Towaoc—Bridge—Until Nov. 6, by C. Sells, comr. Indian Affairs, Wash., D. C., building highway bridge, Ute Mountain Indian Reservation.

N. M., Farmington—Bridge—Until Oct. 22, by Dept. of Interior Office of Indian Affairs, Wash., D. C., building steel highway bridge at Farmington.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Chelsea—Hospital—Bureau Yards and Docks, Navy Dept., Wash., received low bids for emergency hospital buildings at Naval Hospital Reservation, (work complete), from Howard Bros., 412 Dorchester Ave., South Boston, $233,000; W. Crane, Cambridge, Mass., $269,900; Murphy Constr. Co., Dorchester, $319,000. Noted Oct. 11.

★R. I., Melville—Officers' Quarters—Bureau Yards and Docks, Navy Dept., Wash., let contract building 2 sets double officers' quarters, U. S. Naval Coal Depot, to Sullivan Bros., 40 Berkley Ave., Newport, $17,947.

Conn., New London — Piers and Quay Walls—Bureau Yards and Docks, Navy Dept., Wash., received low bids, building, at Naval Sta., (1) timber piles, (2) sheet piling, (3) timber, (4) steel and iron, (5) cleats and mooring posts, (6) concrete, from H. P. Converse & Co., 88 Broad St., Boston, (1) .395c. (b) .125c. (c) .47c.; (2) .32c. (3) $114. (4) .14c. (5) .0975c. (6) $14; Robins Ripley Co., 50 Church St., New York City, (1) .50c. (b) .25c. (c) .53c. (2) .40c. (3) $77.50, (4) .158c. (5) .075c. (6) $14.30; T. A. Scott Co., 292 Pequot Ave., (1) .57c. (b) .46c. (c) .69c. (2) .55c. (3) $120, (4) .12c. (5) .09c. (6) $8000.

N. Y., Brooklyn — Temporary Storehouse —Bureau Yards and Docks, Navy Dept., Wash., received low bids building temporary storehouse on Ordnance Dock, Navy Yard, items 1 to 23, united prices on excav., concrete lumber, plumbing, etc., from North Eastern Constr. Co., 225 5th Ave., New York City; Barney Hocke, Ahlers Constr. Co., New York City and Shelbourne & Blake Constr. Co., Inc., Newark, N. J.

★N. Y., New York — Hydraulic Plants, etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract building hydraulic plants, structural and machine shops, to E. J. Smith, 30 Church St., $59,200.

Pa., Ft. Mifflin—Mine Storage Building—Bureau Yards and Docks, Navy Dept., Wash., received low bids, at Naval Ammunition Depot, (work complete), J. H. Miller, Eutaw and Franklin Sts., Baltimore, Md., $40,206; W. L. Goeltz Co., 50 Church St., New York City, $46,000. Noted Oct. 4.

★Pa., Phila.—Boilers — Bureau Yards and Docks, Navy Dept., Wash., let contract for 2 boilers for aircraft factory to Edgemoor Iron Co., Edgemoor, Del., $51,140, supplemental agreement.

★Pa., Phila.—Buildings — Bureau Yards and Docks, Navy Dept., Wash., let contract for 7 buildings to McCloskey & Bahls, 1620 Thompson St., $180,825. Noted Oct. 4.

★Pa., Phila.—Dredging — Bureau Yards and Docks, Navy Dept., Wash., let contract dredging in Reserve Basin, Navy Yard, to Maryland Dredging & Contr. Co., 1515 Fidelity Bldg., Baltimore, $12,400; time 240 days. Noted Oct. 11.

★Pa., Phila.—Fire Protection System—Bureau Yards and Docks, Navy Dept., Wash., let contract building in aircraft factory, to General Fire Extinguisher Co., 275 West Exchange St., Providence, R. I., $21,282.

★Pa., Phila.—Heating — Bureau Yards and Docks, Navy Dept., Wash., let contract heating system in Y. M. C. A. and Chaplain's Buildings, to Baker Smith & Co., 1605 Sansom St., $22,715.

★Pa., Phila.—Piping—Bureau Yards and Docks, Navy Dept., Wash., let contract piping aircraft factory to Almirall & Co., Inc., 1 Dominick St., New York City, $39,400.

★Pa., Phila.—Quarters for Radio Operators—Bureau Yards and Docks, Navy Dept., Wash., let contract to W. O. Springer, 1624 Latimer St., $14,664. Noted Oct. 11.

★Md., Annapolis—Radio Towers — Bureau Yards and Docks, Navy Dept., Wash., let contract building 4 radio towers to Austin Co., 1026 Bulletin Bldg., Phila., $301,250, cost plus percentage.

Md., Indian Head—Laboratory—Bureau Yards and Docks, Navy Dept., Wash., received low bids, (work complete), from Richardson & Burgess, Colorado Bldg., Wash., D. C., $4500. Noted Oct. 11.

★Md., Indian Head — Piers and Bulkhead—Bureau Yards and Docks, Navy Dept., Wash., let contract, at Naval Proving Grounds, to McLean Contr. Co., foot Andre St., Baltimore, $63,000.

★Md., Indian Head—Turbo Generator—Bureau Yards and Docks, Navy Dept., Wash., let contract, at Naval Proving Grounds, to General Electric Co., River Rd., Schenectady, N. Y., $28,360 (supplemental agreement).

★Wash., D. C. — Buildings — Bureau Yards and Docks, Navy Dept., let contract for buildings for storage of models to Richardson & Burgess, Colorado Bldg., $47,935.

★Wash., D. C.—Marine Guard Barracks —Bureau Yards and Docks, Navy Dept., let contract for work at Arguello, Farallones, Marshall and Oregon, Marine Guard Barracks, Radio Sta., to Gutleben Bros., New Call Bldg., San Francisco, $6963.

★Wash., D. C.—Mono-Rail System—Bureau Yards and Docks, Navy Dept., let contract mono-rail system for foundries at Phila. and Norfolk Navy Yards, to Shepard Electrical Crane Hoist Co., Bulletin Bldg., Phila., $41,652.

★Wash., D. C.—Torpedo Boat Destroyers—Bureau Yards and Docks, Navy Dept., let contract building 20 torpedo boat destroyers, to New York Shipbuilding Co., 120 Broadway, New York City; 25 to Cramp & Co., 25 E. 26th St., New York City; [illegible] to Newport News Shipbuilding & Dry Dock Co., Newport News, Va., cost plus percentage.

★Va., Cape Henry — Buildings — Secy. Agriculture, Wash., let contract 3-story building for Weather Bureau to R. E. Johnson, Virginia Beach, $18,609. Noted Sept. 27.

Va., Waynesboro — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, (a) wood girders, (b) iron girders, from W. W. Keenan, Charlottesville, (a) $34,450, (b) $34,850; W. H. Stillwell, Savannah, Ga., (a) $36,988, (b) $37,445; King Lumber Co., Charlottesville, (a) $38,980, (b) $40,900. Noted Sept. 13.

W. Va., Charleston — Fence — Bureau Yards and Docks, Navy Dept., Wash., received low bids building fence at U. S. Armor Plant, (a) around area north of 8th Ave., (b) south of 8th Ave., (c) both, from Enterprise Iron Works Co., 24th and Yandes St., Indianapolis, Ind., (a) $12,442, (b) $21,025, (c) $33,467; W. A. Snow Iron Works, Inc., 32 Portland St., Boston, Mass., (a) $12,544, (b) $21,997, (c) $34,541; American Fence Constr. Co., 96 Church St., New York City, (a) $12,966, (b) $23,004, (c) $35,729.

S. C., Charleston—Wharf and Trestle—Bureau Yards and Docks, Navy Dept., Wash., received low bids, for magazine on east side Cooper River, (work complete), from Simons & Marant & Co., 18 Broad St., $28,773; P. D. Hay, 29 Bee St., $29,413. Noted Oct. 11.

Fla., Pensacola — Concrete Road and Culverts—Bureau Yards and Docks, Navy Dept., Wash., received low bids building concrete road, 2 concrete drainage culverts and 1 terra cotta pipe culvert, at Naval Aeronautic Sta., (work complete), from H. Monk, 125 South Palafox St., $17,800; S. F. Fulghum & Co., 207 North Palafox St., $18,552; F. G. Proudfoot, 410 Franklin St., Tampa, $20,591. Noted Sept. 27.

★Fla., Pensacola — Seaplane Pier — Bureau Yards and Docks, Navy Dept., Wash., let contract to C. H. Turner Co., 30 East Garden St., $13,233. Noted Sept. 27.

La., New Orleans — Electric Traveling Crane—Bureau Yards and Docks, Navy Dept., Wash., received low bids furnishing in machine shop (a) work complete, (b) alternate, from Whiting Foundry & Equipment Co., Harvey, Ill., (a) $13,780; Niles-Bement, Pond Co., 111 Bway., New York City, (b) $8800; Cleveland Crane & Engr Co., Wickliff, O., (b) $11,475. Noted Sept. 27.

★Mich., Bad Axe — Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids (a) limestone, (b) sandstone, from Northern Constr. Co., 421 Milwaukee St., Milwaukee, (a) $45,628, (b) $46,538; Schmidt Bros. Constr. Co., 105 North Clark St., Chicago, (a) $51,865; W. H. Fissell & Co., Marbridge Bldg., New York City, (a) $63,000, (b) $65,000. Noted Sept. 13.

★Minn., St. Peter—Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to W. O'Neill, Faribault, $40,873. Noted Oct. 11.

★Idaho, Twin Falls—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to R. E. Campbell, Newhouse Bldg., Salt Lake City, Utah, $75,443. Noted Oct. 11.

MISCELLANEOUS

Proposed Work

Flood Protection—Corning, N. Y.—(Official)—Bd. Pub. Wks. rejected bids for conduits and appurtenances for improvement of Monkey Run. Noted Sept. 6.

Garbage Disposal Plant—Newark (Irvington), N. J.—Town plans.

Garbage Disposal Plant—Johnstown, Pa.—City election Nov. 6 to vote on $75,000 bond issue to build garbage disposal plant. J. R. Crissey, city engr.

Levee Work — Shreveport, La. — Caddo Levee Bd. having plans prepared by State Bd. Engrs., New Orleans, for 689,700 cu.yd. levee work above Shreveport, at Briarfield, Rock Point, Landing, Sterling Bayou, Hayti, Corner Place, Hurricane Bluff, Cairo, Cairo-Soda Fountain, etc., and below Shreveport, at Calwell, Riverdale, Leonard to Long Point. Cost between $100,000 and $200,000.

Miscellaneous (Continued)

Elimination of Grade Crossings—Cleveland, O.—City, R. Hoffman, city engr., and New York, Chicago & St. Louis Ry., E. E. Hart, Cleveland, ch. engr., plans to build 12 rein.-con. grade crossings on west side at West 38th, 41st, 44th, 45th, 53rd, 58th, 65th, 74th, 77th and 85th Sts., Lorain and Madison Aves. About $2,500,000. City to appropriate 35% of cost, railroad 65%.

Subway— Moline, Ill.—City Council approved plans to build subway at 14th St. crossing. L. Payton, city engr.

Transmission Line — Dubuque, Ia. — Bd. Supervs. Dubuque Co. granted 20-year franchise to Eastern Iowa Electric Co., 302 Security Bldg., to build electric transmission line over county roads to furnish electrical service in towns of New Wine, Luxemburg and Holy Cross.

Wharf Extension, Etc.—Beaumont, Tex. —City plans to improve wharf and terminal system. F. Keith, chn. wharf and dock com.

Dam—Widtsoe, Utah — See "Excavation and Dredging."

BIDS DESIRED

Fire Escapes—Dover, N. J.—(Official)—Until Oct. 30, by Bd. Educ. at Northside School, for new fire escapes and alterations to South Side School. C. H. Benedict, secy.; advertised in this issue.

Elevated Railway—Phila., Pa.—(Official) —Until Oct. 30, by W. S. Twining, dir. dept. of City Transit, 754 Bourse Bldg., for work appurtenant to Frankford Elevated Railway; advertised in this issue.

PRICES AND CONTRACTS AWARDED

★Coal Trestle—Hudson, N. Y.—(Official) Knickerbocker Portland Cement Co. let contract building rein.con. coal trestle, 300 ft. long, 20 ft. high, together with retaining walls and floor to Turner Constr. Co., 244 Madison Ave., New York City.

BUILDING OPERATIONS FOR OCTOBER

Following is a list of contracts awarded, published by the F. W. Dodge Co. for New England, New York, New Jersey, Pennsylvania, Maryland, Delaware, District of Columbia, Virginia, Ohio, West Virginia, Illinois, Indiana, Iowa, Wisconsin, Michigan, Minnesota, North and South Dakota, and portions of Missouri and eastern Kansas from Jan. 1 to Oct. 1:

January 1 to October 1, 1917	$1,278,640,426
January 1 to October 1, 1916	970,251,397
January 1 to October 1, 1915	680,615,100
January 1 to October 1, 1914	579,042,100
January 1 to October 1, 1913	682,425,500
January 1 to October 1, 1912	627,177,000
January 1 to October 1, 1911	607,638,813
January 1 to October 1, 1910	633,002,305

NEW YORK AND NORTHERN NEW JERSEY

January 1 to October 1, 1917	$247,355,000
January 1 to October 1, 1916	180,803,500
January 1 to October 1, 1915	120,400,500
January 1 to October 1, 1914	100,266,000
January 1 to October 1, 1913	214,106,500
January 1 to October 1, 1912	186,517,000
January 1 to October 1, 1911	183,429,000
January 1 to October 1, 1910	186,084,000

The September total for contracts awarded in the larger territory amount to $122,464,271, as against $165,574,155 for August and $159,200,000 for July. For the smaller territory the September figures are $35,027,000, against $25,498,000 for August and $31,549,000 for July. Building operations generally show a decline.

MEXICO TO BUILD MODERN HIGHWAY

According to reports, the Mexican government has committed itself to the policy of constructing at the earliest possible time a system of modern highways that shall connect all the principal cities and ports of the country. This movement was inaugurated several weeks ago by the Department of Communications and Public Works, following the outlining of the tentative plan for construction and improvement of the highways of the country.

A meeting of good roads enthusiasts from different parts of the country was held in the City of Mexico and the organization of the National Highway Association of Mexico resulted.

It is also proposed to build a modern highway to run from the City of Mexico to Vera Cruz, following the ancient highway that was built by Cortez about 400 years ago. There are still remnants of other ancient highways which were built during the days of Conquistadores and wherever it is possible these old camino reals, or main highways, will be rehabilitated and put to modern use.

ROAD WORK, WASHINGTON

State Rd. No. 21

Bids were received by State Highway Comn., Olympia, Oct. 1, for constructing State Rd. No. 21 from Charleston to Clifton, Kitsap and Mason Counties, from (A) David Govan, Port Angeles (awarded contract); (B) Hans Pederson Constr. Co., Alaska Bldg., Seattle; (C) W. O. Bulette, Bremerton; (D) George A. Bandaret, Bryn Mawr, $102,376; (E) Sloane Bros., Seattle, $113,767. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
118,400 cu.yd. overhaul on above material per each 100 ft	$0 02	$0 35	$0 39
43.1 acres clearing	175 00	01½	02
29.1 acres grubbing	150 00	150 00	160 00
Cu.yd. rip rap hand placed	2 50	150 00	225 00
Cu.yd. slope wall	7 00	6 00	7 00
Lin.ft. guard rail in place, including spikes and bolts	40	6 00	6 00
52.16 M.b.m. timber and plank in place, including spikes and bolts	35 00	50	45
Lin.ft. piling (fir) above	10	40 00	35 00
1,360 lin.ft. piling (fir) below	40	20	35
Lin.ft. piling (cedar) above	10	40	45
Lin.ft. piling (cedar) below	45	20	35
Lin.ft. logs for cribbing	18	40	45
5,060 lin.ft. logs for culverts	18	25	30
890 lin.ft. plain concrete pipe in place, 12-in. diameter	1 00	25	35
1,274 lin.ft. reinforced concrete pipe in place, 18-in. diameter	3 00	1 10	1 00
238 lin.ft. reinforced concrete pipe in place, 24-in. diameter	5 00	2 25	1 75
78 lin.ft. reinforced concrete pipe in place, 30-in. diameter	6 50	3 50	3 00
13,560 cu.yd. surfacing	1 25	5 50	4 00
Lin.ft. porus tile drains, 6-in. diam	30	2 00	1 50
Lin.ft. porus tils drains, 8-in. diameter	40	50	60
Extended totals	$78,007	$92,003	$92,725

PACIFIC HIGHWAY

Bids were received by State Highway Comn., Olympia, Oct. 1, for constructing Pacific Highway from Blanchard to Burlington, Skagit Co., from (A) J. R. Wood, Seattle (awarded contract); (B) Skagit Constr. Co., Mt. Vernon; (C) Chas. G. Huber, Central Bldg., Seattle. The unit bids were as follows:

	A	B	C
6,020 cu.yd. common excavation, including haul of 400 ft	$0 40	$0 70	$0 45
Cu.yd. loose rock excavation, including haul of 400 ft	1 00	1 50	80
3,350 cu.yd. solid rock excavation, including haul of 400 ft	2 00	2 50	2 25
Cu.yd. overhaul on any of above materials per 100 ft	02	03	03
0.63 acres clearing	100 00	100 00	150 00
0.13 acres grubbing	100 00	150 00	150 00
Cu.yd. rip rap, hand placed	5 00	4 00	4 50
316 M.b.m. timber and plank in place, including spikes and bolts	43 50	34 00	43 00
Lin.ft. piling cedar above	.20	10	.20
12,000 lin.ft. piling cedar below	.61	.45	.65
60 lin.ft. plain concrete pipe in place, 12-in. diameter	1 50	3 00	1 49
59-ft. span, undergrade crossing (lump sum)	2,500 00	4,000 00	2,687 00
1,880 cu.yd. surfacing	2 10	2 70	2 25
Extended totals	$36,838	$38,071	$38,754

PACIFIC HIGHWAY

Bids were received by State Highway Comn., Olympia, Oct. 1, for constructing Pacific Highway from Sta. No. 650 to Sta. No. 842. Clarke Co from (A) Arvid Rydstrom, 3102 Pacific St., Tacoma (awarded contract); (B) Sloane Bros., Seattle; (C) Rajotte, Fobert & Winters, Ziegler Bldg., Spokane; (D) Nettleton, Bruce & Eschbach Co., Amer. Bank Bldg., Seattle, $76,277. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
100,000 cu.yd. excavation, including haul of 400 ft	$0 32	$0 35	$0 50½
53,500 cu.yd. overhaul on above material per each 100 ft	02	03	02½
11.83 acres clearing	200 00	175 00	260 00
1.96 acres grubbing	250 00	300 00	325 00
Cu.yd. rip rap, hand placed	5 00	4 00	6 00
254.7 cu.yd. concrete, 1st class	16 00	22 00	18 00
23,970 lb. steel reinforcing bars in place	.10	.11	.08
716 lin.ft. tile drain, 6-in. diameter	.25	.30	.25
96 lin.ft. tile drain, 8-in. diameter	.50	.60	.35
690 lin.ft. plain concrete pipe in place, 12-in. diameter	1 25	1 30	1 00
428 lin.ft. reinforced concrete pipe in place, 18-in. diameter	2 25	2 50	2 60
68 lin.ft. reinforced concrete pipe in place, 24-in. diameter	3 50	3 50	3 75
60 cu.yd. rock for tile	3 50	4 00	3 00
Extended totals	$44,898	$50,221	$64,503

OLYMPIC HIGHWAY

Bids were received by State Highway Comn., Olympia, Oct. 1, for constructing Olympic Highway from Thurston Co. line to Kamilchie, Mason Co., from (A) Alfred & James, Centralia (awarded contract); (B) Sloane Bros. Seattle. The unit bids were as follows:

	A	B
36,540 cu.yd. excavation, including haul of 400 ft	$0 40	$0 40
23,080 cu.yd. overhaul on above material per each 100 ft	05	03
12.1 acres clearing	200 00	150 00
4.3 acres grubbing	250 00	200 00
Cu.yd. rip rap, hand placed	8 00	4 00
68.8 cu.yd. concrete, 1st class	20 00	20 00
6,085 lb. steel reinforcing bars in place	.12½	.10
50 lin.ft. plain concrete pipe in place, 12-in. diameter	1 50	1 30
284 lin.ft. reinforced concrete pipe in place, 18-in. diameter	3 00	2 65
174 lin.ft. reinforced concrete pipe in place, 24-in. diameter	4 00	3 50
64 lin.ft. reinforced concrete pipe in place, 30-in. diameter	5 50	6 00
2.50-ft. span, concrete arch bridge (lump sum)	11,500 00	11,500 00
6,150 cu.yd. surfacing	1 20	1.75
2,240 lin.ft. piling (fir)	.50	.50
Lin.ft. piling (cedar)	.60	.50
Cu.yd. extra concrete, below elevation shown on plan	20 00	20 50
Extended totals	$43,386	$45,169

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until October 23, 1917.

Barge Canal Terminals

STATE OF NEW YORK, SUPERINTENDENT OF PUBLIC WORKS

Albany, September 24th, 1917.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, October 23rd, 1917, at which place and hour they will be publicly opened and read, for the construction of Barge Canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

Terminal Contract No. 38.

For constructing a pier at the foot of West 53rd street, North River, Manhattan.

Contract plans sheets 1 to 12.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue mailed the next day.

PROPOSALS

In the event that more than one surety company is offered as surety on said bonds, co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the state will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

Bids received until November 8, 1917.

Pavement

Harrisburg, Pa.

Pennsylvania State Highway Department, Harrisburg, Pa.—Sealed proposals will be received at said office until 10 A. M., November 8, 1917, when bids will be publicly opened and scheduled and contract awarded as soon thereafter as possible for the reconstruction of 21,426 linear feet of either reinforced concrete or bituminous concrete pavement, 16 feet wide, in Allegheny County; 7857 linear feet of vitrified block pavement, 16 feet wide, in Venango County, and 39,340 linear feet of either reinforced concrete or bituminous concrete and hillside block pavement 16 feet wide, in Somerset County. Plans and specifications may be seen at office of State Highway Department, Harrisburg, Pa., 1001 Chestnut Street, Philadelphia, Pa., 904 Hartje Building, Pittsburgh, Pa. Full particulars and information on application to J. D. O'Neil, State Highway Commissioner.

OFFICE OF THE COMMISSIONERS, D. C., October 10, 1917.—Sealed proposals will be received at this office, Room 509, District Building, until 2 o'clock P.M., on October 18, 1917, for the construction of approximately 3,000 linear feet of 15 in. and 12 in. diameter pipe sewer. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C., LOUIS BROWNLOW, JOHN G. D. KNIGHT, W. GWYNN GARDINER, Commissioners, D. C.

PROPOSALS FOR LEVEE WORK.—Office of Third Mississippi River Dist., P. O. Box 404, Vicksburg, Miss.—Sealed proposals will be received here until 11 o'clock a.m., Nov. 8, 1917, and then publicly opened, for constructing about 1,000,000 cubic yards of levee work. Information on application.

PROPOSALS

Bids received until October 23, 1917.

Road and Bridge Construction

Hartford, Conn.

Sealed proposals will be received at the office of the State Highway Commissioner, State Capitol, fourth floor, west end, until 2 P.M., Tuesday, October 23rd, 1917, for the following road and bridge construction:

Town of CROMWELL. About 3900 linear feet of Bituminous Macadam construction over four (4) inch stone base on the Pond Road. Plans and specifications at office of W. H. Sharp, Division Engineer, 151 Main Street, Middletown, Conn.

Town of MIDDLETOWN: Reinforced Concrete Arch Bridge construction over the Arrawanna River on Berlin Street. Plans and specifications at office of W. H. Sharp, 151 Main Street, Middletown, Conn.

City of HARTFORD: About 1800 linear feet of concrete construction on New Britain Avenue. Specifications at office of R. W. Stevens, Division Engineer, 408 Main Street, Hartford, Conn.

Town of WINCHESTER: About 10,980 linear feet of Native Stone Macadam construction on the Colebrook Road. Plans and specifications at office of R. S. Hulbert, Division Engineer, Winsted, Conn.

Towns of NORTH CANAAN and SALISBURY: A Two (2) Span Reinforced Concrete Arch Bridge over the Housatonic River on the Canaan-Salisbury Road. Plans and specifications at office of R. S. Hulbert, Division Engineer, Winsted, Conn.

Towns of WATERFORD and EAST LYME. Substructure and approaches for 245 foot Steel Truss Swing Draw Bridge over the Niantic River on the Niantic-New London Road. Plans and specifications at the office of the New London County Commissioners, Norwich, Conn.

All bids must be accompanied by a surety company bond or a certified check not less than one-third of the cost of the work. The State Highway Commissioner reserves the right to reject any and all bids.

Dated at Hartford, Connecticut, October 12, 1917.

C. J. BENNETT,
State Highway Commissioner.

Bids received until November 2, 1917.

Reinforced Concrete Viaduct

Richmond, Va.

Sealed proposals will be received at this office until 12 o'clock noon, November 2, 1917, for the construction of a reinforced concrete viaduct over Bacon Quarter Branch and Seaboard Air Line Co.'s property on the Chamberlayne Avenue extension as per plans and specifications prepared by Carneal & Johnston, Architects. Parties proposing to bid will apply to the undersigned for plans and specifications. Forms of proposals can be obtained on application.

A certified check for $1000.00 must accompany each bid as a guaranty of execution of contract. The Administrative Board reserves the right to reject any and all bids.

CHAS. E. BOLLING, City Engineer.

MANEUVER BOATS—U. S. Engineer Office, Wheeling, W. Va.—Sealed proposals will be received here until 11 a.m. (Eastern time), November 16, 1917, and then opened, for furnishing and delivering seven maneuver boats for Ohio River dams in Wheeling district. Information on application.

We repeat the following notice for the benefit of our readers who may have missed it in the October 4th issue.

Experienced Highway Construction Men

Needed for Service in France

[THIS STATEMENT IS AUTHORIZED BY COLONEL JOHNSTON, COMMANDING THE 23RD ENGINEERS.]

Men who have had experience in any branch of road construction are offered an opportunity to see early service in France in special road-building battalions of the United States Army by recruiting plans here announced. These battalions will be required to repair and maintain the highways near the fighting front, over which tremendous traffic is operated continuously. They will also build new strategic highways in the war zone. Consequently, these troops, all volunteers, will be in the thick of the greatest activities.

The new battalions are constituted as regular military units and as a part of the regular army organization. They are fully armed and will be required in emergencies to fight along with other troops. Generally, however, they will be ocupied with road work.

The battalions will form a part of the 23rd Regiment of Engineers of the new National Army. This regiment will eventually have a strength of about 10,500 men—more than an ordinary brigade—and will, so far as is at present known, be the largest in the army. It will be commanded by Col. E. N. Johnston, of the Corps of Engineers, U. S. A.

Many Worth-While Jobs

There will be more highly-paid and high-ranking non-commissioned officers in the regiment, it is believed, than in any other. There will, therefore, be more openings for men of education and practical experience than is usually the case.

The organization of the battalions is as nearly the same as that of large contracting forces as is feasible. Modern road-building machinery has been fully provided, including rock-crushing plants, steam shovels, road rollers, tractors, graders, motor trucks and pumps. A full line of dump wagons, wheel and drag scrapers and similar dirt-moving equipment also will be available. Shops for the repair and maintenance of all the plant and equipment will be operated close to the front.

Much of the plant used on road work in America is new to European engineers, while the methods also are quite different from those used tbroad. A great opportunity is thus offered to demonstrate what skilled Americans can do with modern equipment, and the regiment which is now being recruited must include men to operate the necessary construction plant, to man the shops and, as non-commissioned officers, to handle the forces.

Who Can Qualify

For the non-commissioned officer positions men are required who can qualify in private life in the following lines: Superintendents and assistant superintendents of highway, bridge and quarry work, of mechanical plant and of transportation; chief clerks, material men, stock men, timekeepers; foremen for concrete, road, bridge and quarry work; powder men, riggers, carpenters, iron workers, surveyors and draftsmen.

For the enlisted personnel it is desired to secure men skilled and experienced in one or more of the following occupations: Surveyors, draftsmen, clerks, stenographers, axmen, blacksmiths, blacksmiths' helpers, machinists, gas-engine operators and repairers, crusher operators, hand driller, drill runner (air drills), quarrymen, powdermen, masons, teamsters, pile-driver operators, concrete, form, road and bridge men; tractor operators (gasoline), grader operators (blading and elevating graders), bridge carpenters, motor-truck drivers, chauffeurs, cooks, motor-truck and automobile repair men, pipe fitters, electricians, horseshoers, tailors, shoemakers, musicians (bugle, fife or drum), mechanics, telephone operators, steamfitters, tool sharpeners, ditchers, boatmen (builders and caulkers), shovel runners (gasoline), barbers, veterinarians, French interpreters, bituminous road men, iron workers, riggers, general utility men capable of driving automobiles, motor trucks and all types of gasoline-driven machinery.

Any male American citizen between 18 and 40 years of age, and who has not actually been called by a local board in the draft, is eligible for enlistment in these special battalions, if acceptable physically. All men must first enlist as privates, the rate of pay being $33 per month and expenses. Men with the necessary experience may be assigned to special duties and given non-commissioned rank at rates of pay ranging from $40.20 to $96.00 per month and expenses. The latter include, for both privates and non-commissioned officers, food, clothing, medical attendance and transportation. Those who enlist will be eligible immediately for promotion, acording to their ability and as openings occur. Men who are specially well qualified and recommended will be given definite promise of advancement to higher grades when their enlistment is authorized.

Officers are Specialists

Colonel Johnston, who will command the regiment, was graduated from the United States Military Academy at West Point at the head of the class of 1901. After service on road and bridge work in the Philippine Islands and river and harbor work in the United States, he served as an instructor at West Point and as an assistant to the Chief of Engineers at Washington.

The first two battalions are commanded by Majors I. C. Moller and Henry H. Stickney. Major Moller received his engineering education in France. He has been engaged exclusively in highway work for the last ten years, and for three years has been chief engineer for an American company doing road work in all parts of the world. In this capacity he has been called upon to act as consulting engineer for the governments of almost every Central and South American republic.

Major Stickney was educated at Clarkson College of Technology, Potsdam, N. Y. Since 1906 he has been engaged on state highway work in New York and on the New York State Barge Canal. He has also had considerable experience as consulting engineer in road and water-supply construction. He is a graduate of the Engineer Officers' Training School at Fort Leavenworth and a member of the New York State National Guard.

Captain F. S. Skinner, regimental adjutant, is a graduate of the United State Military Academy. Thus the regiment will be under the direction of those who have fully demonstrated their ability in highway and construction work.

Full information regarding steps that must be taken to enlist in this regiment may be secured from the Commanding Officer, 23d Engineers, National Army, 1419 F St., Washington, D. C., by mailing the following information to him.

Fill in This Form, by Typewriter, if possible, and Mail Today, to
COMMANDING OFFICER, 23rd ENGINEERS, NATIONAL ARMY,
1419 F Street, Washington, D. C.

(1) Name .... (2) Address ....

(3) Age .... (4) Nationality ....

(5) Married or single.............................. (6) Have you been called in the draft?..................

(7) Will you enlist for period of the War?.............. (8) State briefly your road-building or other construction experience ....

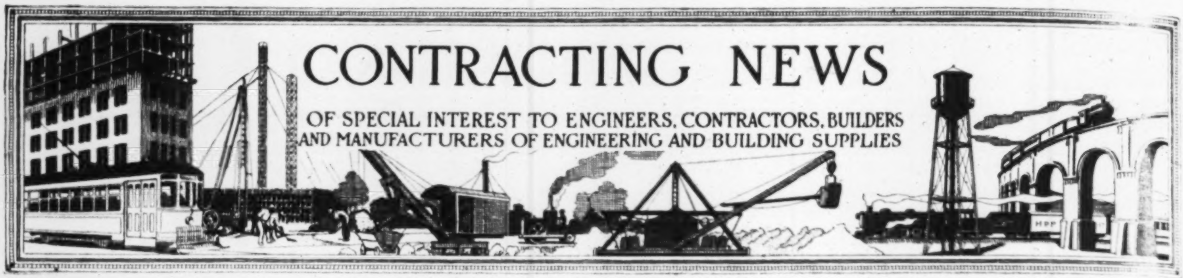
....

(9) What machinery can you operate?..

(10) Your present or a former employer must certify to your qualifications by signing here..................

....

SIGNATURE OF EMPLOYER **EMPLOYER'S ADDRESS FOR TELEGRAMS**



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 43 to 45 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Oct. 29.	Portland, Ore.	Oct. 11
Oct. 29.	Langdon, N. D.	Oct. 25
Oct. 31.	Hoskin, Neb.	Oct. 25
Nov. 1.	Galveston, Tex.	Oct. 25
Nov. 7.	Tonawanda, N. Y.	Oct. 18

SEWERS

Bids Close		See Eng. News-Record
Oct. 29.	Glendale, Ariz.	Oct. 18
Oct. 31.	Seguin, Tex.	Oct. 25
Nov. 1.	Newark, N. J.	Oct. 25
Nov. 1.	Grand Mound, Ia.	Oct. 25
Nov. 1.	New York, N. Y.	Oct. 25
Nov. 2.	Appleton, Wis.	Oct. 25
Nov. 3.	Altamont, N. Y. Adv. Oct. 25.	Oct. 25
Nov. 5.	Cheyenne, Wyo.	Oct. 25

BRIDGES

Bids Close		See Eng. News-Record
Nov. 2.	Richmond, Va. Adv. Oct. 18 and 25.	Oct. 18
Nov. 6.	Oswego, Kan. Adv. Oct. 18 and 25.	Oct. 18
Nov. 6.	Dallas, Tex. Adv. Oct. 11 and 18.	Oct. 11
Nov. 6.	Little Falls, Minn.	Oct. 18
Nov. 12.	Minneapolis, Minn.	Oct. 25

STREETS AND ROADS

Bids Close		See Eng. News-Record
Oct. 29.	Indiana	Oct. 11
Oct. 29.	Highland Park, N. J. (New Brunswick P. O.)	Oct. 18
Oct. 29.	Spartanburg, S. C.	Oct. 25
Oct. 29.	Arkansas	Oct. 25
Oct. 29.	St. Paul, Minn.	Oct. 25
Oct. 29.	Lisbon, O.	Oct. 25
Oct. 29.	Brooklyn, N. Y.	Oct. 25
Oct. 30.	Jersey City, N. J.	Oct. 25
Nov. 1.	Columbus, O.	Oct. 25
Nov. 1.	Raymond, Miss.	Oct. 25
Nov. 1.	Steubenville, O.	Oct. 25
Nov. 5.	California	Oct. 25
Nov. 5.	Bloomfield, N. J.	Oct. 25
Nov. 5.	Pikeville, Ky.	Sept. 27
Nov. 5.	Kansas City, Kan.	Oct. 18
Nov. 5.	Coffeeville, Miss. Adv. Oct. 18 and 25.	Oct. 18
Nov. 5.	Fayetteville, W. Va.	Oct. 18
Nov. 6.	Ft. Pierce, Fla.	Oct. 25
Nov. 6.	Goldendale, Wash.	Oct. 25
Nov. 6.	West Orange, N. J.	Oct. 18
Nov. 6.	Indiana	Oct. 11
Nov. 6.	Morgantown, W. Va. Adv. Oct. 11.	Oct. 11
Nov. 6.	Tallahassee, Fla.	Oct. 25
Nov. 6.	San Diego, Cal.	Oct. 25
Nov. 6.	Waterville, Wash.	Oct. 25
Nov. 7.	Jefferson City, Mo.	Oct. 25
Nov. 8.	Pennsylvania Adv. Oct. 18 and 25.	Oct. 18
Nov. 8.	Morristown, Pa. Adv. Oct. 25.	Oct. 25
Nov. 13.	Prestonsburg, Ky.	Oct. 25
Nov. 14.	Minnesota	Oct. 25
Nov. 19.	Seattle, Wash.	Oct. 25
Nov. 22.	Hindman, Ky.	Oct. 25
Nov. 23.	Kendallville, Ind.	Oct. 25

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Oct. 29.	Duluth, Minn.	Oct. 18
Oct. 30.	Mankato, Minn.	Oct. 25
Nov. 1.	Papillion, Neb.	Oct. 16
Nov. 2.	Albany, N. Y. Adv. Oct. 11 to 25.	Oct. 11
Nov. 2.	Redwood Falls, Minn.	Oct. 25
Nov. 2.	Algona, Ia.	Oct. 25
Nov. 2.	Sibley, Ia.	Oct. 11
Nov. 3.	Winamac, Ind.	Oct. 25
Nov. 7.	Lincoln, Neb.	Oct. 25
Nov. 8.	Harrisonville, Mo.	Oct. 25
Nov. 9.	St. Cloud, Minn.	Sept. 27

BUILDINGS

Bids Close		See Eng. News-Record
Oct. 29.	Trenton, N. J.	Oct. 25
Oct. 30.	Columbia, S. C.	Oct. 18
Oct. 31.	Davenport, Ia.	Oct. 18
Nov. 1.	Lawrence, Kan.	Oct. 18
Nov. 1.	Cleveland Heights, O. (Warrensville P. O.)	Oct. 25
Nov. 1.	Charleston, W. Va.	Oct. 25
Nov. 1.	Detroit, Mich.	Oct. 25
Nov. 2.	Lakefield, Minn.	Oct. 18
Nov. 15.	Northampton, Mass.	Oct. 25
Nov. 25.	Middletown, Mass.	Oct. 4
Dec. 1.	Norfolk, Va.	Sept. 13

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Oct. 28.	Post Office — Waterloo, N. Y.	Sept. 20
Oct. 29.	Buildings—El Cayey, P. R.	Oct. 11
Oct. 29.	Buildings—Grand Isle, La. Adv. Oct. 11.	Oct. 11
Oct. 29.	Distributing System — Charleston, W. Va.	Oct. 25
Oct. 30.	Metal Work, etc. — Key West, Fla. Adv. Sept. 6 and 13.	Sept. 6
Oct. 30.	Post Office—Farmville, Va.	Sept. 27
Oct. 31.	Power House — Brooklyn, N. Y.	Oct. 4
Oct. 31.	Post Office—Hollidaysburg, Pa. Adv. Oct. 4.	Oct. 4
Oct. 31.	Levee Work — St. Louis, Mo.	Oct. 18
Nov. 1.	Lookout—Omaha, Neb. Adv. Oct. 11.	Oct. 11
Nov. 1.	Post Office—Kenton, O.	Sept. 27
Nov. 1.	Construction Materials — Detroit, Mich. Adv. Oct. 4.	Oct. 4
Nov. 2.	Maneuver Boats — Cincinnati, O. Adv. Oct. 4 to 25.	Oct. 4
Nov. 2.	Post Office — Valparaiso, Ind.	Oct. 4
Nov. 3.	Dredging—San Diego, Cal. Adv. Oct. 25.	Oct. 25
Nov. 5.	Post Office — Burlington, N. C.	Oct. 4
Nov. 5.	Tank and Tower—Philadelphia, Pa.	Oct. 25
Nov. 5.	Steel Tower — Charleston, S. C.	Oct. 25
Nov. 5.	Steel Tower—Norfolk, Va.	Oct. 25
Nov. 6.	Bridge—Towaoc, Colo.	Oct. 18
Nov. 7.	Buildings — Elbowoods, N. D.	Oct. 18
Nov. 8.	Levee Work — Vicksburg, Miss. Adv, Oct. 18 and 25.	Oct. 18
Nov. 8.	Piers, etc.—Detroit, Mich. Adv. Oct. 11 to 25.	Oct. 11
Nov. 9.	Post Office—Forsyth, Ga.	Oct. 11
Nov. 13.	Post Office—Harrisonville, Mo.	Oct. 11
Nov. 14.	Post Office—Austin, Tex.	Oct. 11
Nov. 15.	Canals—El Paso, Tex. Adv. Oct. 18.	Oct. 18
Nov. 16.	Maneuver Boats — Wheeling, W. Va. Adv. Oct. 18.	Oct. 18
Nov. 19.	Fitting out Cranes—Washington, D. C.	Oct. 18
Nov. 19.	Shipbuilding Ways — Brooklyn, N. Y.	Oct. 25
Nov. 20.	Post Office—Caribou, Me.	Oct. 18
Nov. 22.	Post Office—Basin, Wyo.	Oct. 25
Nov. 23.	Post Office — Woodbury, N. J.	Oct. 25
Nov. 26.	Dry Dock Crane, Wash., D. C.	Oct. 25
Nov. 27.	Post Office—Chapel Hill, N. C.	Oct. 25
Nov. 28.	Post Office — Bellefourche, S. D.	Oct. 11

MISCELLANEOUS

Bids Close		See Eng. News-Record
Oct. 30.	Piers—Buffalo, N. Y.	Oct. [illegible]
Oct. 30.	Elevated Railway—Philadelphia, Pa. Adv. Oct. 18.	Oct. 18
Oct. 30.	Fire Escapes — Dover, N. J. Adv. Oct. 18.	Oct. 18
Nov. 7.	Duct Line, New York, N. Y.	Oct. 25
Nov. 13.	Channel Improvements — Columbus, O. Adv. Oct. 25.	Oct. 25
Nov. 15.	Pumping Machinery — Brockton, Mass. Adv. Oct. 25.	Oct. 25
Nov. 15.	Flood Control—Dayton, O. Adv. Sept. 13 to Oct. 18.	Sept. 13

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

Mass., Boston — City plans to improve water-works system in Franklin Park. About $30,000. E. F. Murphy, comr. pub. wks.

N. J., Wrightstown—Wrightstown Utilities Corp., incorporated with $150,000 capital stock plans to build water and electric systems here. Runyon & Carey, 843 Broad St., Newark, engrs.

Va., Danville—See "Industrial Works."

Va., Portsmouth—City having plans prepared by Schofield Eng. Co., engrs., Commercial Trust Bldg., Phila., improving water-works system.

N. C., Hickory — City to issue $15,000 bonds to build water-works system.

S. C., Fountain Inn—See "Sewers."

O., Ironton—City plans to issue $30,000 additional bonds to build water-works system. Cost of entire work, about $405,000. R. G. Howell, city engr.

O., Mt. Vernon — City to sell $15,000 bonds Nov. 1 to improve water-works system. R. S. Blum, city engr.

Ill., Grosse Point—(Official)—Village rejected bids for c.i. water pipe, etc. Noted Oct. 4.

Minn., Fergus Falls—City plans to sell $30,000 bonds to lay water and gas mains. H. Blegen, city engr.

Minn., Morris—City election soon to vote on bond issue to build water-works system

Water-Works (Continued)

Kan., Arma—City having plans prepared by A. C. Moore, engr., Frisco Bldg., Joplin, Mo., for water-works system. About $25,000. Bond election soon.

Kan., Caldwell—(Official)—City rejected bids for water-works and electric-light improvements, including brick power station and concrete reservoir. Noted Oct. 4.

Kan., Ogden — City having plans prepared by G. P. Taylor, engr., Stockton, for improving water-works and sewerage systems. About $18,000.

S. D., Mitchell—City election Oct. 30 to vote on $125,000 bond issue to improve water-works. T. Eastcott, clk.

Ark., Little Rock—Arkansas Water Co., 112 East 4th St., plans to improve water-works system, including remodeling pump to 5,000,000-gal. capacity, replacing water mains, etc. About $100,000.

Tex., Waco—City soon lets contract 5,000,000-gal. reservoir on Trice Hill. About $275,000. N. Werinskiold, 409 Hughes Bldg., Dallas, engr. Noted Aug. 2.

Okla., Guthrie—See "Sewers."

Okla., Miami—City voted $45,000 bonds to extend water mains. A. L. Sailors, supt. Noted Oct. 4.

Okla., Okmulgee—See "Sewers."

Wash., Peshastin—City election Oct. 27 to vote on $125,000 bond issue to extend water-works system.

Ore., Richland—City soon lets contract building water-works system. P. H. Dater, Chamber Commerce Bldg., Portland, engr. Noted May 3.

Cal., Tropico—(Official)—City at recent election defeated $50,000 bonds to build water-works system. A. Campbell, supt. Noted Oct. 4.

BIDS DESIRED

Mich., Lakeview—(Official)—Until Nov. 15, by village for water-works system, including steel tank and tower, motor and pump. About $11,500. F. L. Stebbins, village pres. Noted Oct. 11.

Neb., Hoskins—Until Oct. 31, by City, for water-works system. About $10,000. H. T. Tracy, 11 Norfolk Natl. Bank Bldg., Norfolk, engr.

N. D., Langdon—Until Oct. 29, by City, installing water-works and sewerage systems. J. Sheehan, clk. Noted June 28.

Tex., Galveston—Until Nov. 1, by City, for repairs to Alta Loma Pumping Sta. J. D. Kelley, secy. Stowe & Stowe, 311½ 22nd St., archts.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Wis., Reedsburg—City let contract installing water and sewer mains in portions North and South Water and Vine Sts., to Sweeney Bros., Reedsburg, $27,627.

★Tex., Lockney—(Official)—City let contract water-works system, including 9200 ft. 6-8in. c. i. pipe, 2½ tons specials, 75,000 gal. tank and tower, etc. to J. N. Jordan & Co., Plainview. Noted Oct. 11.

Ont., Hamilton—City received low bids installing machinery in Beach Pumping Sta., from Turbine Equipment Co., Ltd., C. P. R. Bldg., steam turbine pumps and centrifugal pumps, $52,517 and $22,420 respectively; Babcock & Wilcox, Ltd., Traders Bank Bldg., boilers and insulation, $16,950 and $605; Canadian Westinghouse Co., Ltd., Traders Bank Bldg., motors, $16,620; Canadian General Electric Co., Ltd., King and Simcoe Sts., transformers, switchboard and apparatus, $14,010 and $4990; Allan General Supplies, 205 Yonge St.; Venturi meters, $3715, all contractors of Toronto. Noted Aug. 16.

SEWERS

Proposed Work

N. J., Glen Ridge—Town plans to build sewage disposal plant.

N. J., Westfield—Town plans to improve trunk line sewerage system for Rahway Valley watershed. About $50,000. A. W. Vois, engr.

Pa., Franklin—Council passed ordinances to build storm sewers in portions Alcorn and Siverly Aves. and Wayne St.; also sanitary sewers in portions Alcorn, Siverly, Keith, Perce, Carson, and Kramer Aves., 5th, Wayne and Martin Sts., also in all of 10th Ward. J. Snow, city engr.

Pa., Pittsburgh — Council passed ordinances to build sewers in portion Comet Way, Connor, and Haverhill Sts. R. Swan, city engr.

Va., Danville—See "Industrial Works."

S. C., Fountain Inn—City voted $75,000 bonds to build sewerage and water-works systems. F. W. Wellborn, clk.

Ky., Norwood—Council passed ordinance to issue $16,000 bonds to build sanitary sewers in Franklin Ave. and Sheridan Dr.

O., Ashtabula—City plans sanitary sewer in portions Samuel St. L. A. Amsden, city engr.

O., Lorain—City lets contract about Oct. 30 for sanitary sewers in portions various streets. C. M. Osborne, city engr. Noted Sept. 13.

O., Youngstown — Youngstown Sheet & Tube Co., Stambaugh Bldg., plans to build 100 residence sewers and streets improvements here. About $500,000. United Constr. Co., Title Guaranty Bldg., St. Louis, Mo., engrs.

Ind., Anderson—City plans to build sewers in portions 3rd and Sycamore Sts. W. J. Shearer, city engr.

Ind., Laporte—(Official)—City does not plan to install southside trunk sewerage system, as stated in our issue of Oct. 4.

Ia., Davenport—City sold $142,000 bonds to build storm and sanitary sewers. R. E. Sowistowsky, city engr.

Ia., Sioux City—City soon lets contract building sanitary sewers in Lowell Ave., Chambers, 23rd, and 5th Sts. T. H. Johnson, city engr.

Kan., Newton—City having plans prepared by Black & Veatch, engrs., 507 Inter-State Bldg., Kansas City, Mo., for sewage disposal plant.

Kan., Ogden—See "Water-Works."

Neb., Omaha—City plans to build sewers in portions Mormon, South Omaha, 25th, Pacific, Pierce, 26th, and H Sts. About $172,000. Will also issue $400,000 additional bonds in January for sewers. J. A. Bruce, city engr. Noted Sept. 27.

Tex., Waco—City had plans prepared by P. Trevino, engr., San Antonio, for sewage disposal plant. About $182,000. Noted May 17.

Okla., Guthrie—City voted $32,000 bonds to extend sewerage and water-works systems. H. P. Cook, comr. pub. utilities.

Okla., Miami—City voted $80,000 bonds to build storm water sewers and $20,000 to extend sanitary sewers. Noted Oct. 4.

Okla., Okmulgee—City election Oct. 30 to vote on $535,000 bond issue to extend sewerage and water-works systems. Noted Aug. 30.

BIDS DESIRED

N. Y., Altamont—(Official)—Until Nov. 3, by Bd. Village Trustees, for sewerage system and sewage disposal plant. C. Martin, clk. Noted Aug. 16. Advertised in this issue.

N. Y., New York—Until Nov. 1, by D. Mathewson, boro. pres. (Bronx Boro.), constructing sewers and appurtenances in portions Rhinelander, Muliner, Matthews, Ldyig, Wallace, Bronxdale, Neill Hunt and Cruger Aves. and Sagamore St. Baisley Ave. and Ft. Schuyler Rd.

N. J., Newark—(Official)—Until Nov. 1, by Bd. Street and Water Comrs., sewer in Sandford Ave., involving 500 ft. 30 in. concrete pipe sewer, 240 ft. vitr. salt glazed pipe sewer, 12 catch basins and 5 manholes. M. R. Sherrard, city engr. Noted Oct. 11.

Wis., Appleton—(Official)—Until Nov. 2, by Bd. Pub. Wks. building sewers in various streets. A. C. Remley, city engr. Noted Sept. 20.

Ia., Grand Mound—(Official)—Until Nov. 1, by Town, for 2½ mi. sanitary sewers and sewerage disposal plant. R. C. Quinn, town clk. C. P. Chase, Clinton, engr. Noted Apr. 26.

N. D., Langdon—See "Water-Works."

Wyo., Cheyenne—Until Nov. 5, by J. J. Showalter, city clk., extending sewers from O'Neil to Dillon St. E. W. Glafcke, city engr. Noted Aug. 9.

Tex., Seguin—(Official)—Until Oct. 31, by C. Bruns, mayor, constructing sewerage system and sewage disposal plant. Bartlett & Raney, Inc., San Antonio, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. J., North Bergen—Town received low bids laying sewer in Tonnele Ave., from R. Mazzone, North Bergen; R. Reilly, Plainfield; W. Whiston, West New York; Nolan & Horning, 309 Kerrigan Ave., Union. Cost estimated at $20,000. Noted Oct. 4.

★Pa., Pennhurst—Eastern Pennsylvania State Institution for Feeble-Minded and Epileptic, Spring City, let contract storm sewers, to W. M. Anderson, 600 Schuylkill Ave., Phila.; about $10,000.

★Md., Hagerstown—City let contract installing main and lateral sewers in various streets and alleys, to H. C. Brooke Co., Inc., Martinsburg, W. Va. Noted Sept. 13.

O., Cuyahoga Falls—(Official)—City received low bids for sanitary sewers from C. L. Wright, Mt. Vernon, $16,846; Gessner Co., Toledo, $17,003; F. R. George Co., Pittsburgh, Pa., $18,441.

★Wis., Reedsburg—City let contract for sewer to Sweeney Bros., $27,627.

★Ia., Ames—(Official)—City let contract storm sewers, involving 7300 ft. 10-15 in. pipe, 13 manholes, and 47 catch basins to A. Coniglia & Co., Omaha, $10,340. Noted Oct. 11.

★Minn., Winona—City let contract laying 1700 ft. storm sewers to W. Danforth, 707 Germania Life Bldg., St. Paul, $35,000. Noted May 12.

★Mo., Kansas City — City let contract sewer in Div. No. 5, Dist. No. 356, to Kinlin Constr. Co., 3426 Michigan St., $11,684. Noted Sept. 13.

★Okla., Ada—City let contract lateral sewer in Dist. No. 6, involving 16,865 8-10 in. sewer pipe, to Koehler Constr. Co., Kansas City, Mo., $25,550; also complete sewage disposal plant, including Imhoff tank, contact beds, etc., to Talbert Constr. Co., Muskogee, $24,673. Noted Sept. 27.

★Wash., Spokane—(Official)—City let contract 4th Ward trunk sewer in Dist. No. 5, to Heikkila, Miller & Paulson, 1609 Water Ave., $11,400. Noted Oct. 18.

★N. S., New Glasgow—City let contract building sewer on Brookside Ave. and Chisholm St., to Gammon & Weir, Archimedes St.

BRIDGES

Proposed Work

Ky., Whitesburg — See "Streets and Roads."

Mo., Kansas City—Bd. Pub. Affairs approved plans of Kansas City Terminal Ry., 1500 Grand Ave., for building rein.-con. viaduct over its tracks on Holmes St. About $200,000. J. E. Gibson, genl. mgr.

Mo., Linn—See "Streets and Roads."

Tex., Ballinger—Runnells Co. plans to issue $100,000 bonds to build rein.-con. bridges and culverts.

Tex., Barstow—(Official)—Ward Co. at recent election voted $45,000 bond issue for culverts. F. I. Dyer, comr.

Okla., Ada—See "Streets and Roads."

Colo., Salida—Chaffee Co., Buena Vista, and State Highway Comn., Denver, soon lets contract for rein.-con. bridge over Arkansas River. About $15,000.

Idaho — (Official) — See "Streets and Roads."

BIDS DESIRED

O., Columbus—See "Miscellaneous."

Minn., Minneapolis—Until Nov. 12, by Hennepin Co. Comrs., building 800-ft. bridge over Minnesota River on Lyndale Ave. Work includes 7-mi. roadway on Hennepin Co. side and 10-mi. on Dakota Co. side. Bids will be asked on 4 types of bridges. Former bids rejected. Toltz Eng. Co., 1410 Pioneer Bldg., St. Paul, engrs. Noted Sept. 27.

Minnesota—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Me., Rumford—Town let contract 2-span bridge at South Rumford to J. H. Kerr, Rumford, $22,000. State and Oxford Co. to appropriate toward cost.

Bridges (Continued)

★Mass., Millbury — Town let contract building 2 steel and cement bridges over Blackstone River, to E. D. Ward Co., 82 Foster St., Worcester, $17,000.

★R. I., Woonsocket—City let contract building bridge and wall over Peters River to Eastern Constr. Co., 660 Winter St.

★Ga., Oglethorpe—Macon Co. Comrs. let contract building 2 rein.-con. bridges to H. H. Hoppendietzel Co., 757 Walnut St., Macon, Ga., $18,000.

★Ind., Goshen—Elkhart Co. and Indiana & Michigan Electric Co. let contract bridge over St. Joseph River on Elkhart Ave., to Elkhart Bridge & Iron Co., Elkhart, $61,800. Noted Aug. 2.

★Ill., Joliet — (Official) — Atchison, Topeka & Santa Fe Ry. let contract building 2 bridges involving 5000 yd. rein.-con., to Standish & Allan, 820 Consumers Bldg., Chicago.

★Wis., Wauwatosa—Town let contract building bridge and temporary bridge to Stein Constr. Co., Medford, Wis., $21,300.

★Minn., Montevideo—Chippewa Co. let contract building bridges No. 2776, 2777 and 2780 to T. M. Thomson, 3326 Garfield Ave., Minneapolis, $10,400.

★Tex., Dallas—(Official)—City let contract building bridge over Turtle Creek Crossing, on Lemmon Ave., to McCall-Moore Eng. Co., 308 Amicable Bldg., Waco, $26,500.

★Okla., Ardmore—Carter Co. let contract building 150-ft. rein.-con. bridge over Caddo Creek to Kansas City Bridge Co., 510 Orear-Leslie Bldg., Kansas City, Mo., $14,500.

★Idaho, Weiser—Washington Co. let contract building steel highway bridge over Weiser River and dismantling old bridge, to Omaha Structural Steel Works, 48th and Leavenworth Sts., Omaha, Neb., $27,800.

★Ont., Dundas—Dundas Co. let contract building 6 bridges to F. M. Egleson, Winchester, $12,000; 6 to H. J. Walker, Cornwall, $12,000; 2 to Ontario Bridge Co., Ltd., Toronto, $10,000.

STRUCTURAL STEEL WORK

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Idaho, Weiser—See "Bridges."

REINFORCED CONCRETE

Proposed Work

Mo., Kansas City—See "Bridges."
Mo., St. Louis—See "Buildings."
Tex., Ballinger—See "Bridges."
Colo., Salida—See "Bridges."
Colo., Windsor—See "Miscellaneous."
Wash., Seattle—See "Industrial Works."

BIDS DESIRED

★Minnesota—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., S. I., Clifton—See "Industrials."
★N. Y., Rochester—See "Industrial Works."
★Ga., Oglethorpe—See "Bridges."
★Tenn., Nashville—See "Buildings."
★O., Cleveland—See "Miscellaneous."
★Ill., Joliet—See "Bridges."
★Okla., Ardmore—See "Bridges."

STREETS AND ROADS

Proposed Work

N. J., Cliffside—Bd. Educ. plans to pave and grade high school grounds. About $10,000.

Pennsylvania—(Official)—State Highway Comn., Harrisburg, rejected bids building State Aid road in Somerset Twp., Somerset Co., 6675 ft. Noted Sept. 20.

Pennsylvania — (Official) — State Highway Comn., Harrisburg, received no bids improving 18,083 ft. state highway, Route 268, from Waynesburg to Rice's Landing, Morgan and Franklin Twps., Greene Co. Noted Sept. 20.

Pennsylvania—(Official)—State Highway Comn., Harrisburg, rejected bids building portion State Highway Route 159, through Hanover Twp., Lehigh Co., 11,857 ft. rein.-con., 16-20½ ft. wide. Noted Oct. 18.

Pa., Bloomsburg—Columbia Co. plans to improve State Rd. No. 4, through here. State Highway Dept., Harrisburg, to pay half of cost.

Pa., Carnegie—Boro. Council passed ordinance to grade, pave, and curb Chestnut St. O. B. Highley, boro. engr.

Pa., Erie—City soon lets contract paving, grading, curbing and draining portion West 29th and Holland Sts. About $24,034 and $18,310, respectively. F. G. Lynch, city engr.

Pa., Hawley—City plans to pave Church and Keystone Sts., Penn and Main Aves. E. J. Richardson, clk.

Pa., Johnstown—City election Nov. 6 to vote on $200,000 bond issue to pave streets. J. R. Crissey, city engr.

Pa., Pittsburgh — Council passed ordinance to pave and curb portions Royal and McKee Sts., Flotilla, Fletcher and Tulip Ways; also grade portion Formosa Way. R. Swan, city engr.

Pa., Williamsport—City plans to pave 2-mi. new streets. J. B. Otto, city engr.

Va., Danville—See "Industrial Works."

N. C., Louisburg — Franklin Co. voted $20,000 bonds to build roads in Gold Mine Twp. J. D. Alston, chn. Noted Sept. 20.

S. C., McCormick—McCormick Co. will let contract in spring, building 18-mi. Federal-Aid road. M. E. Worrell, co. engr.

Fla., Bartow — Polk Co. sold $142,600 bonds to build hardsurface road from Auburndale to Lake Co. line. A. T. Mann, chn. comrs. Noted May 17.

Fla., Daytona — City plans to improve several miles of streets, concrete or Warrenite. L. Smith, chn. street com.

Tenn., Camden—Benton Co. having plans prepared for paving Bristol-Memphis highway.

Tenn., Dyersburg—Dyer Co. plans election to vote on $150,000 bonds to build section Jefferson Davis Highway, to be 16 ft. wide, concrete, rock or bitumen. Federal Government to appropriate $25,000 toward cost, State $25,000. Noted Oct. 11.

Ky., Cattlesburg — Boyd Co. plans road between Ashland and Cannonsburg, 8.13-mi. Cost between $135,187 and $215,000, according to material used. Federal Government and State to pay half of cost. Noted Apr. 26.

Ky., Whitesburg—Letcher Co. soon lets contract building roads and bridges. About $30,000.

O., Chillicothe—City plans to issue $6,000,000 bonds to improve various streets. E. M. Redd, city engr.

O., Cincinnati—Butler Co. having plans prepared improving Cunningham Rd., Symmes Twp. About $20,000. A. Boeh, co. surv.

O., Columbus—City to sell $71,871 bonds Nov. 12 to improve Cory, Putnam and other streets. U. K. Stringfellow, city engr.

O., Sandusky—City plans to pave portion Hancock St. About $22,000. Erie Co. to contribute $800 toward cost. A. F. Johnston, city engr.

O., Youngstown—See "Sewers."

Wisconsin—State Highway Dept., Madison, had plans prepared building concrete road, between Fond Du Lac and Oshkosh, about 9 mi. W. Conway, Green Bay, div. engr. state highway dept.

Ia., Burlington—City had plans prepared paving portions 8th St. About $12,117. C. E. Waterhaus, city engr.

Minn., Bemidji—City election Oct. 29 to vote on $25,000 bond issue to build bridge and sidewalks, paving, curbing. G. Stein, city clk.

Minn., Brainerd—Crow Wing Co. plans to spend $100,000 to improve roads in 1918. C. L. Mott, co. engr.

Kan., Baxter Springs—City plans to pave streets in business district. About 40 blocks.

Kan., Lawrence—Douglas Co. Comrs. will apply to State Highway Comn. for approval to build hard surfaced road from Ft. Leavenworth to Ft. Riley, 18 ft. wide.

Kan., Parsons—City passed resolution to pave portion North Central Ave., vitr. fiber brick or brick block, also to resurface and oil portion 18th, Belmont, Stevens, Corning, Crawford and 22nd Aves. F. W. Frye, clk.

Kan., Wichita—Sedgwick Co. plans road from Wichita to eastern line of county, rock asphalt pavement, 18 ft. wide, 3 ft. crushed rock shoulder. About $12,500.

Neb., Falls City—City plans to issue $10,000 bonds to pave streets.

Mont., Superior—Mineral Co. plans road near Alberton, 4½ mi., eliminating Nigger Hill. About $120,000. J. D. Dwyer, clk.

Mont., White Sulphur Springs—(Official) U. S. Office Pub. Rds. will receive bids about next spring for 30 mi. mountain road, 14 ft. wide with ditch 4 ft. wide, making practically 16 ft. road, in Little Belt Mts. About $120,000. Scott Leavitt, pres. Noted Oct. 11.

Mo., Greenfield—Dade Co. plans election to vote on $23,000 bond issue to improve roads between Ash Grove, Everton and Greenfield.

Mo., Jefferson City—Cole Co. plans to improve road from Moreau Blvd. to Tanner Bridge by way of Hough Park, 2 mi., macadam.

Mo., Linn—(Official)—Osage Co. defeated at recent election $200,000 bonds to build roads and bridges. Noted Sept. 27.

Mo., Marble Hill—Bolinger Co. plans to build road between Lowndes and Marble Hill, 4 mi., connecting Greenville and Cape Girardeau.

Mo., St. Louis—City plans to pave portions King's Highway. E. R. Kinsey, pres. bd. pub. wks.

Arkansas — State Highway Dept., Little Rock, had plans prepared for Mountain Home Rd., Baxter Co., to Missouri State line, 36 mi.; road in Phillips Co., connecting Helena and West Helena, 4½ mi. asphaltic concrete on macadam base, 20 ft. wide. About $140,000.

Ark., Clarendon — Monroe Co. Comrs. postponed indefinitely letting of contract for road building. Parkes Eng. Co., Citizens Bank Bldg., Pine Bluff, engrs. Noted Oct. 4.

Tex., Anson—Jones Co. Dist. No. 2, plans election soon to vote on $200,000 bond issue to build roads.

Tex., Barstow—(Official)—Ward Co. at recent election voted $80,000 bond issue for 45 mi. hard surface road. F. I. Dyer, comr. Noted Sept. 27.

Tex., Beaumont — Jefferson Co. election Nov. 17 to vote on $500,000 bond issue to improve highways.

Tex., Brownsville—Cameron Co. Comrs. plan highway from here north to Harlingen and west to Hidalgo Co. line, to be link in Diamond Loop Highway connecting San Antonio, Leredo, Corpus Christi, and this city, 32 mi. tarvia. About $200,000.

Tex., Corsicana — Powell Good Roads Dist., Navarro Co., election Nov. 10 to vote on $60,000 bonds to build roads.

Tex., Decatur—Wise Co. Comrs. will vote on $80,000 bond issue to build Meridian Highway.

Tex., Galveston—(Official)—Bd. Comrs. soon lets contracts placing 60,000 cu.yd. filling on beach crest between 25th and 39th Sts. and surfacing with 6 in. mainland soil. About $55,000. G. H. Willits, city engr. Noted Oct. 4.

Tex., Gilmer — (Official) — Upshur Co. plans election Nov. 10 to vote on $25,000 bond issue for building roads. Noted Oct. 11.

Tex., Groesbeck — (Official) — Limestone Co., Rd. Dist. No. 9, having plans prepared by Hess & Skinner, engrs., South Western Life Bldg., Dallas, for road improvements. About $100,000. Noted May 24.

Tex., Haskell—Haskell Co., Dist. No. 3, plans election to vote on $75,000 bond issue to improve roads.

Tex., Orange—Orange Co. Rd. Dist. No. 3, voted $30,000 bond issue to build shell and gravel roads. Noted Sept. 20.

Tex., Paris—City voted $20,000 bonds to improve Public Sq. and pave portion 23d St. R. G. Tyler, city engr. Noted Sept. 20.

Tex., Robert Lee—Coke Co. Comrs. plan to build highway through here. About $60,000.

Tex., Snyder—(Official)—Scurry Co. defeated $100,000 bond issue to build roads. Noted Sept. 20.

Tex., Sulphur Springs—Hopkins Co. received $50,000 Federal Aid to be applied to build State Highway No. 1, Texarkana-El Paso Rd.

Okla., Ada—City election Nov. 16 to vote on $570,000 bond issue to build good roads and bridges.

Okla., Bartlesville — Washington Co. Comrs. plan to improve 50 mi. road. About $67,000 available.

Streets and Roads (Continued)

Okla., Durant—(Official)—City Council having plans prepared by L. Varner Stinson, city engr., paving Elm St., 13,000 sq. yd. asphalt on 4 in. concrete base.

Okla., Okmulgee—City soon receives bids paving portion Cherokee St. and Oklahoma Ave., tarvia. M. N. Coles, city engr.

Idaho—(Official)—State Highway Comn., Boise, receives bids about December, grading highway between New Meadows and Grangeville, placing culverts and erecting bridges, $150,000. Noted July 5.

Idaho, Coeur d'Alene — Kootenai Co., Fourth of July Canyon, voted $25,000 bonds for newly created highway improvement district. Federal Government to appropriate $50,000 toward cost, State $50,000 and Shoshone Co., $50,000. Noted Oct. 4.

Idaho, Sand Point—Bonner Co. Comrs. election Nov. 3, to vote on $200,000 bond issue to build roads.

Idaho, Twin Falls—Twin Falls Co. plans election soon to vote on $1,000,000 bond issue to pave highway from Buhl to Hansen; also build portion East and West highway, crushed rock and gravel. O. E. Carlson, chn. Noted Sept. 6.

Ariz., Cooper Hill — Gila Co. soon lets contract building El Capitan Highway; about $85,000. Also completing Miami-Gibson Rd., and Little Walnut Rd. in Pleasant Valley.

Wash., Cheney—City voted $20,000 bonds to improve 36 blocks of pavement. Noted Oct. 4.

Wash., Davenport — Lincoln Co. Comrs. had plans prepared building 5-mi. road north of Davenport on North Star Route, including grading 26 ft. wide, and surfacing 10 ft. wide. About $25,000. Noted Oct. 11.

Wash., Kelso—Cowlitz Co. soon lets contract building Martin-Bluff-Woodland section of Pacific highway. State and Federal Government to appropriate $50,000 each toward cost of work. R. M. Gillis, engr.

Wash., Raymond — City had plans prepared for building road on north side, including grading and planking. About $18,850. A. Hendricks, city engr.

Wash., Seattle—City plans to pave portion 6th Ave. About $37,966. A. H. Dimock, city engr.

Oregon — State Highway Comn., Salem, soon lets contract grading road between Wolf Creek and Roberts Mountain and between Mitchell and Pineville, Wheeler Co. About $12,500. County to pay $7500 of cost. H. Nunn, highway engr.

Cal., Colusa—Colusa Co. plans to issue $400,000 bonds to build road connecting Meridian with State Highway, 1½ mi.; Princeton Rd. to Maxwell; Grimes Rd. to connect with State Highway; College City to Arbuckle; Williams to Venando. J. W. Kaerth, co. surv.

Cal., El Cajon—(Official)—City election Oct. 30 to vote on $11,500 bond issue to build 20-ft. paved highway through city. L. T. Machum clk. Noted Oct. 11.

Cal., Madera—City plans to improve F St. About $66,000. E. M. Saunders, acting city clk.

Cal., Santa Ana—City plans to pave portions Bristol St., connecting city with county road. About $17,000. Property owners to pay half of cost. C. C. Bonebrake, city engr.

Ont., Dutton—Town Council will receive bids about Nov. 1, building cement walks and curbs on Main and Shackleton Sts. J. D. Blue, city clk.

BIDS DESIRED

N. Y., Brooklyn—Until Oct. 29, by L. H. Pounds, boro. pres. regulating, curbing, and paving Bway., Ave. M and West 36th St., asphalt (3 contracts).

N. Y., New York—Until Nov. 1, by D. Mathewson, boro. pres. (Bronx Boro.), paving portions Victor St. and Van Nest Ave., bituminous concrete on cement foundation.

N. Y., New York—Until Nov. 1, by C. D. Van Name, boro. pres. (Richmond Boro.), concrete sidewalks on University Pl. and Lockman Ave.

N. J., Bloomfield—Until Nov. 5, by City paving portion Cedar St. and Weaver Ave.; improving Broad, Thomas, Lawrence and 2nd Sts., including 4000 sq.yd. telford pavement, 30,000 lin.ft. curbing and sidewalks. E. Baechlin, city engr.

N. J., Jersey City — Until Oct. 30, by City Comrs., repaving Hopkins Ave., brick. C. A. Van Kuren, city engr. Noted Sept. 13.

N. J., Newark—(Official)—Until Nov. 1 by Bd. Street and Water Comrs., paving 8000 ft. Renner Ave., bitulithic pavement, 6-in. concrete base, 1700 ft. new 16 x 5 in. four-cut bluestone, etc. M. R. Sherrard, city engr. Noted Sept. 13.

Pa., Norristown—(Official)—Until Nov. 8, by W. D. Heeber, controller, Montgomery Co., paving portion Germantown Pike; advertised in this issue.

S. C., Spartanburg — Until Oct. 29, by Spartanburg Co. Highway Comn., building 12.9 mi. 20 ft. top soil on Buncombe Rd. between Woodruff and Crossanchor. R. Tull, co. highway engr. Noted July 19.

Fla., Ft. Pierce—Until Nov. 6, by St. Lucie Co. Comrs., grading and hardsurfacing 3 mi. North Bridge Rd. and 2¼ mi. South Canal Rd. P. C. Eldred, clk. M. Hallowes, Ft. Pierce, engr. Noted July 12.

Fla., Tallahassee—(Official)—Until Nov. 6, by Leon Co. Comrs., building Woodville Rd., 6 mi. Former bids rejected. B. E. Reed, co. engr. Noted Oct. 4.

Miss., Raymond—Until Nov. 1, by W. W. Downing, clk. bd. supervs., Hinds Co., grading and graveling Clinton and Raymond Rds.

Ky., Hindman—Until Nov. 22, by City, for improving various streets. About $20,000.

Ky., Prestonsburg—Until Nov. 13, by Floyd Co., for building roads. About $40,000.

O., Bryan—Until Oct. 29, by J. A. Neil, city clk., improving and paving 2 sections of Union St.

O., Lisbon—(Official)—Until Oct. 29, by Columbiana Co. Comrs., improving portion Lisbon-Bayard-Canton Pub. Rd., Hanover Twp. About $82,095. C. E. Hamilton, clk.

O., Steubenville—Until Nov. 1, by F. M. Ranck, clk. Jefferson Co., improving Shull Rd. in Mifflin Twp. and Mann Rd. in Jefferson Twp.

Ind., Kendallville—Until Nov. 23, by City, paving portions Main and Williams Sts.; also certain alleys.

Minnesota—Until Nov. 4, by State Highway Comn., 300 Shubert Bldg., St. Paul, for Minnesota Federal Aid Project No. 3, Millelacs Co., involving 35 acres clearing, 17 acres grubbing, 155,338 cu.yd. grading and side ditching, 14,662 cu.yd. off-take ditching, 21,179 cu.yd. guard rail, 4840 lin.ft. riprap, 33,459 cu.yd. gravel surfacing, rein.-con. and corrugated metal culverts, etc. W. C. Doane, co. aud.

Minn., Minneapolis—See "Bridges."

Minn., St. Paul—Until Oct. 29, by H. W. Austin, purch. agt., improving portions Mount Curve Blvd., Roblyn Park, alley in Block 3, Carbon St., Folsom and Como Aves. O. Claussen, city engr.

Mo., Jefferson City — (Official) — Until Nov. 7, by Cole Co. Court, building change in Jefferson City and Osage Bend Rd., Sect. 29, Twp. 43, Range 11, in Gum Springs. E. F. C. Harding, co. highway engr. Noted Sept. 27.

Arkansas—Until Oct. 29, by State Highway Comn., Little Rock, building 9-mi. road in Road Impvt. Dist. No. 1, Faulkner Co., involving 37,600 cu.yd. grading, 600 lin.ft. pipe culverts, 350 cu.yd. concrete, 100 lin.ft. steel trestle.

Wash., Goldendale — Until Nov. 6, by Klickitat Co. Comrs., grading and macadamizing 16-mi. Permanent Highway No. 6, known as White Salmon-Snowden Rd.

Wash., Waterville—(Official)—Until Nov. 6, by Douglas Co. Comrs., grading, draining and surfacing with crushed rock 1½ mi. highway at Mansfield. About $10,194. Noted Oct. 11.

California—Until Nov. 5, by State Highway Comn., Sacramento, building highway in Los Angeles Co. between San Fernando and Tejunga, 10-mi., concrete; resurfacing road in Fresno Co., between Malaga and Fresno, 2.7-mi., asphalt; grading roads in Humboldt Co., between Garberville and Miranda, 15.6 mi.

Cal., San Diego—Until Nov. 6, by Bd. Superv., San Diego Co., building 30,074 ft. 5-in. concrete pavement, 20 ft. wide, from city limits to Camp Kearney.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Massachusetts—(Official)—State Highway Comn., Boston, let contract building section of highway in Kingston Twp. to Marshfield Constr. Co., Marshfield, $11,181.

Mass., Boston—City received lowest bid grading Grove St., West Roxbury, from Central Constr. Co., 228 Southampton St., Roxbury, $33,250.

Mass., Boston—(Official)—City received low bids building bituminous macadam road and retaining walls in Pontiac St., Roxbury, from J. C. Coleman & Sons Co., 1620 Tremont St., Roxbury, $19,626; A. Baruffaldi, Parker Pl., Somerville, $19,900.

N. Y., Lawrence—(Official)—City received low bids paving Meadow Lane, 6-in. concrete pavement, 18 ft. wide, from Ganford Co., 581 Jackson Ave., Long Island City, $13,245; Both & Weston, Lawrence, $15,225; Wright & Kowalski, 667 Grove St., Jersey City, N. J., $15,783; Hastings Pav. Co., 25 Broad St., New York City, $17,837.

★N. Y., Mineola—Nassau Co. let contract improving Shore Rd., from Reid Ave. to Bayles Corner, Port Washington, to Andrew Bros., Mineola. About $15,045. Noted Oct. 18.

N. Y., New York—M. M. Marks, boro. pres., received low bids widening, regulating and laying concrete foundation in portion 38th, 43rd, 44th, 45th and 46th Sts., from A. Ferris, 672 Degraw St., Brooklyn, $38,318; Cramer & Leedecke, 114 East 52nd St., $43,036; Burnside Contg. Co., 270 Burnside Ave., $51,353; widening, regulating and repaving with wood block on concrete foundation 59th St., from 3rd to 5th Ave., (2 jobs), from W. J. Fitzgerald, 547 West 45th St., $29,762 and $20,348 respectively.

N. Y., New York—D. Matthewson, boro. pres. (Bronx Boro.) received low bids repaving Park Ave. west from East 162nd at East 165th Sts., asphalt on concrete foundation from Asphalt Constr. Co., Madison Ave. and 137th St., $10,960; Uvalde Asphalt Paving Co., 1 Bway., $11,367; Davney Asphalt Co., 52 Vanderbilt Ave., $11,622.

N. Y., Yonkers—City received low bids regulating, grading, and improving portions School St., from F. Gross, Yonkers, $19,969; J. Cianfaglione, 41 Western Ave., $20,000; Yonkers Contg. Co., $20,433.

★New Jersey — State Highway Comn., Trenton, will improve highway between Trenton and Camp Dix, Wrightstown, by day labor. About $70,000. Noted Sept. 20.

★N. J., Belvidere — (Official) — Warren Co. let contract dirt roads in Blairstown Twp., to Arbogast Eng. and Constr. Co., Rockdale, N. Y.; about $30,000.

★N. J., Newark—Bd. Freeholders Essex Co. let contract road improvements in Wantage and Sussex, to Franklin Contg. Co., 52 Vanderbilt Ave., New York City.

★N. J., Newton—Bd. Freeholders, Sussex Co., let contract grading Ross' Corner Sussex Rd. to Franklin Contr. Co., 52 Vanderbilt Ave., New York City, $11,537. Noted Sept. 20.

★N. J., North Bergen—Town let contract repaving Traphagen St., to W. T. S. Crichfield, 54 5th St., Hoboken. About $57,000. Noted Oct. 18.

Pennsylvania — (Official) — State Highway Dept., Harrisburg, received low bids building 13,007 ft. vitr. brick road in Manor Twp., Armstrong Co., from Rinehart Bros., 7th St., East Liverpool, O., $131,468; 2454 ft. vitr. block pavement, Bellefonte Boro., Center Co., R. B. Taylor, Bellefonte, $28,150; Loomin & King, Central Trust Bldg., Altoona, $27,867. Noted Sept. 20.

★Pennsylvania — (Official)—State Highway Comn., Harrisburg, let contract building State Aid road from Scottdale to Greensburg, Westmoreland Co., 2540 ft., to R. Gallardi, Connellsville, $20,955. Noted Oct. 18.

★Pa., Mt. Penn—Boro. council let contract paving Perkiomen Ave., 5100 sq.yd. cement, to A. F. Header, 1607 Spring Rd., Reading. About $15,000.

★Pa., Phila.—Dept. Pub. Wks. let contract to Barber Asphalt Co., Land Title Bldg., for paving portion Dittman St., $3322; 3rd St., $4054; 9th St., $6650; Sedley Ave., $9497.

★N. C., Winston-Salem — City let contract paving boulevard to Atlantic Bitulithic Co., Virginia Ry. & Power Bldg., Richmond, Va.

Streets and Roads (Continued)

★Ala., Athens—City let contract paving several streets, brick, to Alabama Paving Co., Amer. Trust Bldg., macadam, to J. L. Mullarky, both of Birmingham. About $125,000 available for work. Noted Aug. 23.

★Miss., Mendenhall — Simpson Co. let contract gravel road from Gatesville to Harrisville and Braxton, to T. S. Taylor.

★Ky., Frankfort—City let contract improving Bridge, St. Clair and Main Sts., Texico asphalt, to Asphalt Maintenance Co., Chicago, $13,350.

★Ohio—State Highway Dept., Columbus, let contracts road work as follows: Clermont Co., Section "N-1," Milford-Hillsboro Rd., paving with waterbound macadam, 0.98 mi., to John Reulbel Constr. Co., Cincinnati, $11,317; Darke Co., Sect. "A-1," Dayton-Greenville Rd., concrete, York & Studebaker, Greenville, $59,495; Knox Co., Sect. "K," Columbus-Wooster Rd., rein.-con., 1.61 mi., to Latshaw & Stinchcomb, Fostoria, $47,431; Mahoning Co., Sect. "J," Toledo Napoleon Rd., water-bound macadam, 4.48 mi., to Smith Constr. Co., Youngstown, $53,791; Summit Co., Sect. "N-1," Cleveland-Massillon Rd., brick, 1.8 mi., to W. E. Burke & Sons, Akron, $57,853. Noted Oct. 18.

★O., Cleveland—City let contract improving, paving, and repaving portion Woodhill Rd., to A. M. Pejsa Paving Co., 2359 East 93rd St., $62,770, and Baldwin Bros., 560 Ross Bldg., $60,450; paving Ivanhoe Rd., grade elimination, Riley Bros., 348 Arcade, $24,252. Noted Oct. 11.

★O., Marysville—Union Co. let contract rebuilding Bygalia and Arbela Rd. in Washington Twp., 3.56 mi., crushed stone, to Marion Stone Co., Marion, $10,779.

★O., Norwalk—Huron Co. Comrs. let contract paving roads, involving 11,000 sq.yd. concrete and 9900 sq.yd. brick, to A. J. Baltes, Norwalk. About $25,159.

★O., Upper Sandusky — Wyandot Co. Comrs. let contract improving Parker Rd. to Baum & Ankney, Upper Sandusky. About $11,463.

★Ind., Indianapolis — City let contract paving portions California St., asphalt, to Marion Co. Constr. Co., 317 Amer. Central Life Bldg., $4.50 per ft.; portion Dearborn St., asphalt and stratified curb, to Amer. Constr. Co., 1201 East Georgia St., $6.78 per ft. Noted Sept. 6.

Mich., Allegan—Allegan Co. received low bid paving road in Laketown Twp., waterbound macadam, from Boyes & Blanford, $59,507.

★Ill., Cairo—City let contract improving Paving Dist. No. 3, to E. Prosser, $26,128.

★Ill., Elgin — City let contract paving River St., 7450 sq.yd. brick, to Illinois Hydraulic Stone & Constr. Co., $23,161. Noted Sept. 27.

★Ill., Granite City — Morris Realty Co. let contract grading subdivision, 65,000 yd. to L. Rich Constr. Co., East St. Louis. About $12,000. Noted Sept. 27.

★Ill., Ranoul—Village let contract paving portions Chandler St., to H. K. Rhoades & Co., Lincoln, Ill. About $28,000.

★Kan., Columbus — (Official) — Cherokee Co. Comrs. let contract 10 mi. roads to D. E. Dorsey, Weir City, $58,227. Noted Oct. 4.

★Mont., Billings — (Official) — City let contract 13,360 sq.yd. paving in Impvt. Dist. No. 29, to Warren Constr. Co., Billings, $37,462. Noted Oct. 4.

★Ark., Forest City—St. Francis Co. let contract roads in Dist. No. 2, Part Memphis-Little Rock Highway, to Healey Constr. Co., Meridian, Miss., $121,000. Noted Aug. 23.

★Ark., Little Rock—(Official)—City let contract paving several streets, asphalt or concrete, to E. F. Wilcox, Kansas City, Mo. About $79,000. Noted Oct. 4.

★Tex., Dallas—City let contract paving portions Melba, Tyler, 12th, 8th, Beckley, and Victor Sts., to Standard Eng. Co., 113 Martin St.

Tex., Ft. Worth—City received lowest bid paving Travis Ave. from General Constr. Co., 506 F. & M. Bank Bldg., $2.05 per sq.yd.

★Okla., Ada—City let contract paving portions East Main St. to Western Paving Co., 518 Terminal Bldg., Oklahoma, $1.98 per sq.yd. Noted Oct. 4.

★Okla., Chickasha — City let contract paving portions Main St., asphaltic concrete, to Western Paving Co., 518 Terminal Bldg., Oklahoma, $1.98 per sq.yd.

★Idaho, Nez Perce—(Official)—Lewis Co. let contract building 8500 ft. 16-ft. highway known as Nezperce-Green Creek highway to C. M. Payne & Co., East 724 Mission St., Spokane, Wash.; unit basis. Noted Oct. 4.

★Ore., Portland—City let contract paving portions Larabee and Goldsmith Sts., bitulithic, on crushed rock base, to Warren Constr. Co., Journal Bldg. About $19,490. Noted Sept. 20.

California — (Official) — State Highway Comn., Sacramento, received only bid building 12.4 mi. highway in Sonoma Co., and 7.7 mi. in Butte Co., from Municipal Impvt. Co., 803 MacDonald St., $133,111 and $56,240 respectively; low bids for 16-mi. highway in Marin Co., E. J. Tracy, Sheldon Bldg., $173,347; F. Rolandi, 550 Montgomery St., $177,347; Palmer & McBryde, Hooker & Lent Bldg., $186,625, all of San Francisco. Noted Sept. 20.

★Cal., Los Angeles — City let contract furnishing asphaltic cement for 1 year to Standard Oil Co., 1727 San Fernando St., $14.40 per ton packed in barrels and $12.40 per ton delivered in tank carloads. Noted Aug. 16.

★Cal., Los Angeles — City let contract paving portions West 1st St., bitulithic, to G. Oswald, O. T. Johnson Bldg., $213,991. Noted Oct. 11.

★Cal., Modesto—Bd. Supervs. Stanislaus Co. received no bids building 16.67 mi. highway. Work will be done by day labor under the direction of E. H. Annear, co. surv. Noted Sept. 27.

★Cal., Richmond—City let contract paving 10th St. to L. L. Page, 8th and Bissell Sts., $25,299.

★Cal., Visalia—Tulare Co. let contracts for county highway system as follows: Exeter-Merryman Rd., to Highway Constr. Co., Highland, $72,603; Tulare-Paige Rd., J. E. Lee, Tulare, $60,801; Dinuba-Kingsburg Rd., Isbell Constr. Co., San Diego, $81,127; Porterville-Woodville Rd., Brady & Flynn, Humboldt Bank Bldg., San Francisco, $124,971. Noted Oct. 18.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

New Jersey—New Jersey & Pennsylvania Traction Co., Hanover and Warren St., Trenton, granted permission by Bd. Pub. Utility Comrs. to issue $50,000 bonds to grade road from Gladstone to Pitney. G. Ettinger, ch. engr.

Kentucky—Baltimore & Ohio R.R. having surveys made for 10-mi. branch line from Esco into headquarters of Beefhide Creek, to reach coal lands. H. A. Lane, Baltimore, ch. engr.

Kentucky — Louisville & Nashville R.R. plans to douole-track line from Winchester to Sinks, about 59 mi. W. H. Courtney, Louisville, ch. engr.

Kentucky—Shelbyville & Frankfort Realty Co. had plans prepared by Phillips & Beach, engrs., Real Estate Trust Bldg., Phila., for 19½ mi. interurban railway from Shelbyville to Frankfort, to be known as Frankfort-Shelbyville Interurban Line. R. Cox, Shelbyville, ch. engr.

Illinois—Chicago City Ry., Borland Bldg., Chicago, plans to issue $2,172,000 bonds to build and extend its lines. H. B. Fleming, ch. engr.

Missouri—St. Louis & East St. Louis Interurban Ry., D. F. Parsons, 7 Collinsville Ave., East St. Louis, Ill., genl. mgr., and St. Louis & Illinois Ry. applied to Pub. Serv. Comn. for permission to build downtown interurban loop to connect with free bridge at St. Louis.

Oklahoma—Oklahoma, Kansas & Missouri Ry. plans to extend line from Picher to Columbus, Kan. H. C. Flower, Kansas City, Mo., pres.

New Mexico—New Mexico Central R.R., 120 mi. long, has been purchased by Federal Export Corp., 115 Bway., New York City, who plans to electrify same or use internal combustion locomotives.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Indiana — (Official) — Pennsylvania Lines west of Pittsburgh let contract grade revision on Michigan Division at Camden to P. T. Clifford & Son, Valparaiso.

EXCAVATION AND DREDGING

Proposed Work

O., Lorain—Dredging—See "Miscellaneous."

S. D., Sioux Falls—(Official)—Drainage—Minnehaha Co. rejected bids cleaning and deepening 10 mi. channel, D. D. Nos. 1 and 2, also cutting 2 mi. ditches, 20-ft. bottom, and straightening Big Sioux River, north of Sioux Falls; part of D. D. Nos. 1 and 2. E. H. Shonkle, co. aud. H. M. Derr, Pierre, state engr. Noted Oct. 11.

Wyo., Lovell—Ditches—See "Miscellaneous."

Mont., Billings—Irrigation—J. Pope and T. Arthur, 311 Electric Bldg., plans to spend $45,000 for building private irrigation system, Mission Valley.

Mo., Palmyra — Drainage — South River D. D. plans to spend $70,000 to improve system. B. F. Smiley, Hannibal, Mo., engr.

Cal., San Diego—Irrigation—E. Fletcher granted permission by State Water Comn. for diverting 8 second ft. direct and 12,011 acre ft. per annum storage of Escondido Creek in San Diego Co. for irrigation purposes. Work involves main canal, 2 mi. long, and diversion and rein.-con. storage reservoir dam, 140 ft. high, 400 ft. long on top and 200 ft. long at bottom, to irrigate 3600 acres in Rancho San Dieguito. About $250,000.

BIDS DESIRED

O., Cloumbus — Dredging — See "Miscellaneous."

Ind., Winamac—(Official)—Ditch—Until Nov. 3, by Pulaski Co., building Mary S. Eckman, et al. ditch, main ditch, 18,035 ft. long, involving 35,502 cu.yd. excav. Branch No. 1, 1854 ft., 2356 cu.yd. excav. Branch No. 2, 3736 ft., 4101 cu.yd. excav. R. E. Nutt, constr. comr.

Ia., Algona—Drainage—Until Nov. 2, by Bd. Supervs. Kossuth Co., building D.D. No. 152, involving 46,245 ft. 6-24 in. tile; D.D. No. 153, 38,461 ft. 6-22 in. tile; Sub D.D. No. 6, 17,650 ft. 6-22 in. tile. E. H. Beardsley, aud.

Minnesota — Ditch — See "Streets and Roads."

Minn., Redwood Falls—Ditch—Until Nov. 2, by Redwood Co., building Branch No. 25 of Co. Ditch No. 24, involving 16,000 ft. open ditch, 122,524 cu.yd. excav. About $12,252. L. P. Larson, aud.

Neb., Lincoln—(Official)—Excavation—Until Nov. 7, by Peterson & Devoe, attys., Sanitary Dist. No. 1, excavating new channel Salt Creek. W. S. Scott, 310 Little Bldg., engr.

Mo., Harrisonvile—Drainage—Until Nov. 8, by D. K. Hall, secy., Grand River D. D. of Cass and Bates Cos., building 24 mi. open ditch, involving 2,800,000 cu.yd. excav.; 10 lateral ditches involving 272,000 cu.yd. excav. G. Bird, Harrisonville, engr.

PRICES AND CONTRACTS AWARDED

N. Y., New York—Dredging—Dept. Docks and Ferries received low bid dredging at foot West 46th St., North River, from Morris & Cumings Dredging Co., 17 State St., $146,300.

★Ga., Marietta — Dredging — Cobb Co. Drainage Comrs. let contract dredging Big Altoona Creek to Thompson & Mosley, Inc., Atlanta, $32,500.

★Tenn., Huntingdon—Drainage—Carroll Co. let contract reclamation system, Rutherford Fork D. D., involving 10 mi. canals and ditches, etc., to Canal Constr. Co., Ex. Bldg., Memphis, $60,000.

★Ky., Owensboro—Drainage — Drainage Comrs. Daviess Co., let contract straightening Panther Creek, to McWilliams Dredge Co., 332 South Michigan Ave., Chicago, $428,902. Noted June 14.

★Ia., Boone—Drain—Boone Co. let contracts building Drain No. 168, involving 20,270 ft. 6-24 in. tile to Carver & Hambly, Col., Ia., Iowa Pipe & Tile Co., 4th and Hayes St., Des Moines and McHose Sand & Tile Co., Boone. Noted Oct. 4.

★Minn., Marshall—Ditch — Lyon Co. let contract building Co. Ditch No. 37, to F. E. Smith, Clarion, Ia., $23,500; No. 38, to A. Henrickson, Askov, Minn., $14,174. Noted Sept. 27.

INDUSTRIAL WORKS

Proposed Work

Mass., New Bedford—Union Street Ry. Co., 814 Purchase St., plans 6- 7-story, 80 x 115-ft. brick and rein.-con. power house on Middle St. About $665,000. H. M. Hope, 185 Devonshire St., Boston, engr.

Industrial Work (Continued)

N. Y., Buffalo—Hornspeed Propelling Co., [illegible] Main St., recently incorporated with $1,500,000 capital stock, plans to build factory. J. A. Horne, pres.

N. Y., Buffalo—Lehigh Valley R.R. plans brick boiler house, South Ogden and Dingens Sts.; also brick boiler house, machine shop and storehouse, Ft. Tifft St. About $25,000 and $50,400 respectively. G. F. Hand, 143 Liberty St., New York City, ch. engr.

N. Y., Ithaca—Hires Condensed Milk Co., 913 Arch St., Phila., having plans prepared by W. Morrell, archt., 913 Arch St., Phila., 2-story addition to condensary here. About $50,000.

N. Y., Long Island City — Continental Varnish Co. had plans prepared by L. A. Abramson, archt., 220 5th Ave., New York City, for group of factory buildings. Varick and Johnson Aves., and Ingraham St. About $60,000.

N. Y., New York—Willoughby Garage Corp., 25 Court St., Brooklyn, having plans prepared by Cantor & Dorfman, archts., 371 Fulton St., Brooklyn, for 2-story, 92 x 154 ft. rein.-con. garage, 238-255 West 19th St. About $100,000.

N. J., Paterson—H. H. Kurkjian, 18 Bridge St., secured site on Camden St., and plans to build silk mill containing 150,000 sq. ft. floor space.

Pa., Phila.—Ft. Mifflin Shipbuilding Co. recently incorporated with $10,000,000 capital stock, plans shipbuilding plant on Delaware River, near League Island. A. Masters, pres.

Md., Cumberland—Kelly-Springfield Tire, Cook St., Akron, O., had plans prepared by S. Dieschler & Sons, engrs., Farmers Bank Bldg., Pittsburgh, Pa., for 700 x 900-ft. factory, 100 x 150-ft. machine shop, and 150 x 150-ft. power house. About $5,000,000.

Va., Danville—Dan River & Riverside Cotton Mills plan general improvements to its mills; also to mill village, including women's dormitory, sewerage and waterworks system, concrete sidewalks, fencing railway, under passes, etc. About $300,000.

Va., Roanoke—City plans election to vote on $150,000 bond issue to build 80 x 170-ft. market house. C. M. Brown, mayor.

W. Va., Huntington—United Casket Co., Huntington, recently incorporated with $150,000 capital stock, plans to build factory.

N. C., Wilmington—Chapin Sacks Mfg. Co., 1st and M Sts., plans to build ice-cream factory. About $50,000.

La., New Orleans—Marine Paint Co., 411 South Peters St., has increased its capital stock from $50,000 to $500,000, and plans factory.

La., New Orleans—Union Seed & Fertilizer Co., Hennen Bldg., plans addition to sulphuric plant. About $125,000.

La., New Orleans—Wilson & Co., Union Stock Yards, Chicago, and 816 1st Ave., New York City, plans to expend $2,000,000 to build killing and packing plant here.

O., Akron—R. B. Biscuit Co. plans to build large warehouse. Gehres & Ritchie, engrs., 335 Akron Savings & Loan Bldg., surveying site.

O., Akron—Ohio Wire Goods Mfg. Co., 1071 Bank St., increased its capital stock from $100,000 to $500,000 and plans new factory, Bank St. and North Case Ave.

O., Cleveland — City Ice Delivery Co., 1935 Euclid Ave., soon lets contract for bottling factory and office building, Madison Ave., and West 117th St. About $200,000. C. C. Conely, c/o owners, engr.

O., Cleveland—Gates Elevator Co., 3330 Bway., plans factory on Pearl St. About $100,000.

O., Cleveland — J. Heller, 2326 Lorain Ave., having plans prepared by W. Markowitz, archt., 403 United Bank Bldg., for 3-story, 30 x 135-ft. factory and store building on East 5th St. About $55,000.

O., Cleveland—Service Auto Storage Co. lets contract about Nov. 1, for 2-story 116 x 240 ft. public garage. About $100,000. A. M. Gordon, 838 Schofield Bldg., mgr. A. F. Janowitz, Permanent Bldg., archt.

Ind., Hammond — Swift & Co., Union Stock Yards, Chicago, having plans prepared by C. H. Kane, engr., for fertilizing plant to comprise group 1-story buildings. About $500,000.

Ind., Indiana Harbor—Standard Forgings Co. plans to build addition to its plant here, including machine shop. About $200,000.

Mich., Ludington—Haskall Mfg. Co., North Rowe St., plans to build new additions to plant; also install machinery. About $1,000,000.

Mich., Port Huron—Romeo Foundry Co. plans 90 x 200-ft. addition to its factory here. About $200,000. L. A. Holme, pres.

Ill., Chicago — A. Nelson Mfg. Co., 564 West Randolph St. had plans prepared for 1-story, 234 x 239 ft. auto accessories building at 2702-22 Southport Ave. About $110,000. S. N. Crowen, 30 North La Salle St., archt.

Ill., Chicago—White Eagle Brewing Co., 3755 South Racine Ave., had plans prepared by A. Rocha, archt., 1225 North Ashland Ave., 2-story bottling plant at Wall and 38th Sts. About $75,000.

Ill., Harvey—Buda Mfg. Co. plans 4-story, 80 x 260-ft. addition to its plant. J. Viles, 80 East Jackson Blvd., Chicago, pres.

Wis., Milwaukee — Milwaukee Tank Works, 851 Kinnickinnic Ave., increased its capital stock from $25,000 to $100,000; proceeds to be used for enlarging and improving plant. E. A. Bienenstock, secy.

Wis., West Allis—Economy Paper Products Co., 315 Wright St., plans to build 3-story brick factory. About $50,000.

Wis., West Bend—West Bend Aluminum Co. having plans prepared by Federal Eng. Co., archts., Stephans Bldg., Milwaukee, 3 and 1-story, 72 x 190-ft. and 50 x 60-ft. factory and warehouse. About $75,000. B. C. Zielger, secy.

Ia., Sioux City—Metz Baking Co., 410 Pearl St., receiving bids about Dec. 1, building 4-story, 60 x 132-ft. bakery. About $60,000. N. T. Vorse, 911 S & L Bldg., Des Moines, archt.

Mo., Kansas City—Riverside Storage Co., recently incorporated, plans 3 warehouses, 8 stories each. About $2,000,000. G. J. Miller, W. Volker and E. F. McElroy, incorporators.

Colo., Denver—International Rubber Co., 1569 Bway., soon lets contract, 4-story, 125 x 145-ft. factory and warehouse. About $100,000. W. L. Rice, 1608 Bway., archt.

Wash., Seattle—F. D. Black, of Black Mfg. Co., Colman Bldg., plans 4-story, 80 x 256-ft., rein.-con. factory on Rainier Ave. About $80,000.

Wash., Seattle—Sound Paper Co., of Seattle, plans to purchase a site at Everett and Lake Washington Sts., and build paper mill. About $6,000,000.

Ore., Portland—Amer. Powdered Coal Co. purchased 2½ acre site and plans to build plant. About $100,000.

Ore., Portland—Sunset Motor Co. soon lets contract for 3-story, 81 x 112-ft. brick and concrete garage, 12th Ave. and Pike St. About $60,000. I. B. Johnson, 3838 Evanston Ave., archt.

Cal., Fresno—California Raisin Growers' Assn., Rowell Bldg., plans to build warehouses and factory buildings. About $1,500,000 McDonnell & Kahn, San Francisco, engrs.

Cal., Stanislaus—Sierra & San Francisco Power Co., 58 Sutter St., San Francisco, plans to build addition to local plant. About $1,000,000.

Ont., Toronto—T. Essery, Elliott House, plans to build warehouse. About $50,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston** — Cummington Real Estate Trust let contract 3-story, 63 x 341-ft. brick and rein.-con. auto sales and service building to McDonald & Kivell, 10 High St.

★**N. Y., S. I., Clifton**—Pouch Terminal Co., 17 State St., New York City, let contract 7-story, rein.-con. warehouse to include piers and bulkheads, to be built between Clifton and Stapleton to Faribault Bldg. Corp., 21 Park Row, New York City.

★**N. Y., Rochester**—Bausch & Lomb Optical Co., 1635 St. Paul St., let contract 4-story, 120 x 400-ft. rein.-con. factory, St. Paul, Lowell and Martin Sts., to Turner Constr. Co., 244 Madison Ave., New York City. Noted Oct. 4.

★**Pa., Chester**—Phila. Electric Co. let contract 400 x 400-ft. power plant, Beach and Palmer Sts., to Stone & Webster Engr. Corp., 147 Milk St., Boston.

★**Va., Newport News** — Newport News Shipbuilding & Drydock Co. let contract factory to J. Stewart & Co., 30 Church St., New York City. About $600,000.

★**Ill., Moline**—Deere & Co., 1325 3rd Ave., let contract 1-story, 134 x 204-ft. dry kiln to P. H. Lorenz, 413 Peoples Bank Bldg. $75,000.

★**Neb., Omaha**—Hoagland Lumber Co., Keeline Bldg., and T. R. Kimball, 936 World-Herald Bldg., let contract 4-story warehouse and store building to J. C. Mardis Constr. Co., 750 Brandeis Theater Bldg. $200,000.

★**Mo., Kansas City**—Monarch Transfer & Storage Co., 31st and Highland Sts., let contract 5-story, 30 x 55-ft., brick and rein.-con. storage building and garage on 31st and Michigan Sts., to L. Breitag & Son, 3701 West Prospect Pl. About $50,000.

Ark., Little Rock—C. A. Sawyer let contract 2-story, 100 x 150-ft. brick warehouse to J. D. Johnson, 420 Johnson St. About $50,000.

★**Ore., Astoria**—Port Comn. let contract 8-story warehouse to W. Wells, Seattle, Wash., $56,913.

BUILDINGS

Proposed Work

Mass., Brockton—School—Bd. Educ. receives bids about Nov. 15 for 2-story school and assembly hall on Kenelworth Ave. About $80,000. R. P. Jackson, 145 West Elm St., archt.

N. Y., New York—Armory—City appropriated $280,000 to enlarge armory of Squadron "A," 94th and 95th Sts. and Park Ave. Pilcher & Tachau, archts., 109 Lexington Ave., prepared plans.

N. Y., New York—Hospital, etc.—Knickerbocker Hospital having plans prepared by Helmle & Corbett, archts., 190 Montague St., Brooklyn, for hospital, main building, 216 x 108 x 109 ft., garage, isolation building and nurses' home. Convent Ave. from 130th to 131st St. M. G. Foster, pres.

N. Y., Port Dickinson—High School—Port Dickinson & Ogden School Dists., having plans prepared by Jewel & Umbrect, archts., Press Bldg., Binghamton, 2-story. E. Beckwith, Fenton, trustee.

N. Y., Yonkers — Home — C. Neustatter Estate, c/o W. R. Rose, atty., 128 Bway., New York City, plans 2-story convalescents' home. About $250,000. York & Sawyer, 30 East 41st., New York City, archts.

Pa., Chester — High School — Bd. Educ. soon lets contract on revised plans for 4-story, addition. About $200,000. C. S. Adams, 2509 Arch St., Phila., archt. Noted Sept. 6.

Pa., New Castle—Hospital—New Castle Hospital plans 5-story, 44 x 146-ft. brick addition. About $125,000.

Pa., Phila.—Temple—Ancient Arabic Order Nobles of the Mystic Shrine plans to build Lu Lu temple. About $1,000,000. W. Freeland Kendrick, grand potentate.

Pa., Vandling—High and Grade School—Bd. Educ. soon lets contract, 2-story. About $50,000. G. W. Esterhent, Connell Bldg., Scranton, archt.

Va., Danville—Dormitory—See "Industrial Works."

Va., Martinsville—Store and Hotel—Hotel Henry Corp. soon lets contract, 3-story, Church and Broad Sts. About $50,000. A. Marhood, R. & C. Bldg., Bluefield, W. Va., archt.

S. C., Spartanburg—Hospital—Spartanburg Co. voted $200,000 bond issue to build hospital. W. H. Broom, superv.

Ala., Birmingham—Hospital—City plans. About $300,000. H. B. Wheelock, 17-19 Steiner Bldg., archt.

O., Canton—Hotel—Canton Real Estate Dealers, c/o T. Conner, archt., Erie Bldg., plan. About $150,000.

O., Cleveland — Library — City Library Bd., 1375 Euclid Ave., will receive bids about Nov. 1, brick, Superior Ave. and 105th St. About $50,000. O. Coltman, 10714 Deering Ave., archt.

O., Cleveland — Store — See "Industrial Works."

O., Franklin — School — Bd. Educ. had plans prepared by E. J. Mountstephen, archt., Union Bank Bldg., Dayton, brick and stone. About $100,000.

Buildings (Continued)

O., Warren—City Hall—City plans to issue $250,000 bonds to build.

O., Warren — Hotel — G. Baker, Monroe St., plans, 8-story, on High and Haron Sts. About $200,000.

Ind., Laporte—Sanitarium—Island Assn., c/o S. Von Gunten, archt., 30 North Dearborn St., Chicago, having plans prepared. 3-story, 11 x 360 ft., brick, island in Pine Lake, near here. About $300,000.

Mich., Detroit—School—Bd. Educ. plans addition to Hely School. About $50,000. C. A. Gadd, bus. mgr. Malcomson & Higginbotham, 404 Moffat Bldg., archts.

Mich., Detroit—Y. M. C. A. plans 10-story, 75 x 100-ft. building. About $300,000. C. W. Cowls, Washington and Clifford Sts., pres. A. Kahn and E. Wilby, 58-60 Lafayette St., soon receive bids.

Ill., Chicago. — Library — City plans library to be known as Henry Edward Legler Regional Library, Crawford Ave. and Monroe St. About $75,000.

Ill., Evanston—Hotel, Store and Apartment—F. M. Anderson, L. M. Nelson, and J. Lindquist, having plans prepared by R. S. De Goyler, archt., 122 South Michigan Ave., Chicago, 6 story, 170 x 264 ft. About $700,000.

Wis., Madison — Theater — Cosmodami Amusement Co., 753 Johnson St., soon lets contract 100 x 130 ft. About $125,000. Rapp & Rapp, 69 West Washington St., Chicago, archts.

Wis., Superior—School—Bd. Educ. having plans prepared by F. E. Johnson, archt., Trust Blk. About $150,000.

Ia., Sioux City—Temple—Masonic Bldg. Com. having preliminary plans prepared by Beuttler & Arnold, archts., 609 Security Bldg., 4-story, 50 x 150-ft. About $150,000. D. M. Brownlee, chn.

Ia., Story City—School—City plans $50,000 bond issue for school.

Ia., Washington — School — Bd. Educ. plans. About $200,000. Eckland, Fugard & Knapp, Moline, Ill., archts.

Minn., St. Paul—School—Bd. Educ. plans, 3-story, on 14th St. About $200,000. A. Hausler, Pioneer Press Bldg., archt.

Kan., Eldorado—Hotel and Office—C. R. Sowers, 875 Spaulding Ave., Wichita, and associates, plan, 8-story. U. G. Charles & Co., Schwirter Bldg., Wichita, archts.

Kan., Pittsburg—Hospital—Sisters of St. Joseph plan, 3-story, 50 x 138-ft., brick and rein.-con. About $100,000. G. W. Van Meter, Murdock Bldg., Wichita, archt.

Kan., Wichita — Church — University Friends congregation having plans prepared by S. S. Voight, arch., 4th Natl. Bank Bldg., brick and stone. About $50,000.

Neb., Omaha — Schools — City election Nov. 20 to vote on $2,250,000 bond issue to build schools. W. T. Bourke, 505 City Hall, secy.

Mo., Kansas City — School — Dominican Fathers had plans prepared by White & Dean, archts., 311 Bellfontaine St., 2-story, 100 x 128-ft. About $85,000.

Mo., St. Louis—Office—Finance & Mortgage Co. plans, 16-story, rein.-con., 8th and Olive Sts. About $1,400,000.

Tex., Palestine—Hospital—International & Great Northern Ry. plans. About $50,000. O. H. Crittenden, Houston, ch. engr.

Okla., Tulsa—Gymnasium—Kendall College, c/o E. P. Harwell, 1324 South Baltimore St., plans, 2-story, 100 x 150-ft., brick and rein.-con. About $100,000. C. K. Birdsall, 1002 Commerce Bldg., Kansas City, Mo., archt.

Ariz., Phoenix—Hospital—Sisters' Hospital having plans prepared for new hospital to replace one recently destroyed by fire. About $100,000.

Wash., Olympia — Office — State having plans prepared. About $400,000. J. Zittle, Jamieson Bldg., Spokane, cons. archt., state capitol comn.

Wash., Seattle—Hotel—Busch Hotel Co., Jackson St. and 8th Ave., soon lets contract, 3-story addition. About $150,000. J. L. McCauley, New York Blk., archt.

Ore., Portland—School — Bd. Educ. soon lets contract Hawthorne-Buckman school. About $190,000.

Cal., Sacramento—Capitol—State plans to build. About $3,000,000.

Ont., Orillia — Hospital — Town plans. About $75,000. C. E. Grant, clk.

BIDS DESIRED

Mass., Northampton — Infirmary — Until Nov. 15, by Trustees of Smith College, 2-story, 96 x 100 ft. brick. About $80,000. Putnam & Taylor, Bement Bldg., archts.

N. J., Trenton — (Official) — Hospital — Until Oct. 29, by F. H. Bent, state archt., State House, for extension to criminal insane building at State Hospital. Noted Oct. 18.

W. Va., Charleston—(Official)—Church—Until Nov. 1, by W. E. Moore, chn. bldg. com., First Christian congregation, 1112 Virginia St., 1-story, 81 x 115-ft., stone, terra cotta brick, hollow tile, rein.-con., structural steel. About $65,000. W. H. St. Clair, Capitol and Quarrier Sts., archt. Noted Oct. 11.

O., Cleveland Heights—(Warrensville P. O.)—School—Until Nov. 1, by Bd. Educ., 2-story. About $180,000. D. E. Carpenter, 34 Leader-News Bldg., Cleveland, pres. F. Warner, 718 Hippodrome Bldg., Cleveland, archt. Noted July 19.

Mich., Detroit—(Official)—Schools—Until Nov. 1, by Bd. Educ., (C. A. Gadd, business mgr., 50 Bway.), building Nellie Leland School, Russell and Catherine Sts.; also addition to Greusel School, Medbury and Moran Sts.

Mo., St. Louis—Clinic—Until Oct. 30, by E. R. Kinsley, pres. bd. pub. wks., 208 New City Hall, 4-story. About $190,000. Noted Oct. 18.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Binghamton—Schools—Bd. Educ. received lowest bid for Bevier St. school, from Schaeffer Constr. Co., Peoples Constr. Bldg. About $56,970.

★N. Y., New York—Clubhouse—Knights of Pythias let contract, 2½-story, 70 x 200-ft. brick, on East 149th St., to Jardin Co., 507 5th Ave.

★N. Y., New York—Store—Ford Motor Co., 1723 Bway., let contract 6-story, 30 x 55 ft. at Bway. and 54th St. About $300,000.

★N. J., Morristown—Hospital—All Souls Hospital, Mt. Kemble St., let contract, 3 story, 41 x 170 ft. brick, to J. McKeefrey, 1416 Bway., New York City. About $100,000.

★N. J., Newark—Church—St. Casimir's congregation, c/o Rev. F. P. Knappek, 164 Nichols St., let contract 2-story, 75 x 158-ft., to Gunn-Va Dale Co., 31 Clinton St., $100,000.

W. Va., Wheeling—Fire House—City received low bid, at Dam No. 24, Ohio River, from Pitt Constr. Co., Fulton Bldg., Pittsburgh, $56,000.

★La., New Orleans — School — Turo-Shakespeare Almhouse let contract, 2-story, 60 x 180-ft., brick, to J. Geary, Perrin Bldg. About $56,000.

★Tenn., Nashville — Library — Peabody College let contract, 3-story, to Foster-Creighton Co., 4th and 1st Bl. About $180,000. Noted Apr. 5.

★Tenn., Nashville—Sunday-School—First Presbyterian congregation let contract 3-story; 80 x 80-ft. rein.-con. addition, to F. Proctor Co., Nashville. About $70,000.

★O., Cleveland Heights — (Warrensville P. O.)—Home—Montefiore Home for Aged and Infirm Israelites let contract, 2 and 3 story, 160 x 122 ft., to A. H. Hansen, 2413 East 93rd St. About $150,000. Noted Aug. 30.

★Ind., South Bend—Hospital—St. Joseph's Hospital let contract, 3-story, 41 x 100 ft., to Larson & Danielson, Laporte. About $100,000.

★Mich., Flint—Hotel—Citizens Hotel Co. let contract, 6-story, 150 x 195 ft., to W. E. Wood, Ford Bldg. About $700,000.

★S. D., Brookings—Administration—Agricultural College, c/o Regents of Educ., let contract addition to A. H. Wold Constr. Co., Brookings, $100,000.

Mont., Havre — Mercantile — Ryan Mercantile Bldg. Co. received lowest bid from Lease & Richards, Great Falls. About $67,725.

★Cal., Los Angeles—Bank and Office—J. Benton Van Nuys let contract, 3-story, 60 x 155 ft. rein.-con. and brick, Spring St. to Leonard & Peck, H. W. Hellman Bldg., $50,000. Noted Sept. 20.

★Que., Montreal — Office — Canadian Northern Express Co., 411 Dorchester St., W., let contract to R. Rigby, Montreal. About $58,000.

★Man., Winnipeg—Nurses' Home—Winnipeg General Hospital, Bannatyne Ave., let contract addition to Carter-Halls-Aldinger Co., 1010 Union Bank Bldg., $90,000.

FEDERAL GOVERNMENT WORK

Proposed Work

Mass., Boston— Timber Bulkhead — Bureau Yards and Docks, Navy Dept., Wash., preparing plans.

Conn., New London — Torpedo Storage Building—Bureau Yards and Docks, Navy Dept., Wash., preparing plans building at Submarine Base. About $30,000.

N. Y., New York—Extension of Pneumatic System—Bureau Yards and Docks, Navy Dept., Wash., preparing plans. About $25,000.

Pa., Phila. — Reservoir — Bureau Yards and Docks, Navy Dept., Wash., preparing plans for 2,000,000-gal. rein.-con. reservoir. About $30,000.

Pa., Phila.—Shop—Bureau of Yards and Docks, Navy Dept., Wash., soon lets contract temporary boat building shop.

Wash., D. C.—Coast Artillery Quarters—War Dept. (I. W. Littell, brig. genl.), will soon select sites and prepare plans for certain coast artillery quarters. About $28,000.

S. C., Charleston—Incinerator and Can Sterilizers—Bureau Yards and Docks, Navy Dept., Wash., preparing plans.

S. C., Charleston—Power Plant Improvements—Bureau Yards and Docks, Navy Dept., Wash., preparing plans. About $100,000.

Fla., Key West—Filling—Bureau Yards and Docks, Navy Dept., Wash., preparing plans. About $25,000.

Fla., Miami—Dredging and Filling—Bureau of Yards and Docks, Navy Dept., Wash., soon lets contract. About $20,000.

Ala., Sheffield — Nitrate Plant — War Dept., Wash., D. C. (N. D. Baker, secy.), plans, on Tennessee River near Muscle Shoals.

Cal., Mare Island—(Vallejo P. O.)—Medical Supply Depot — Bureau Yards and Docks, Navy Dept., Wash., preparing plans. About $130,000.

Cal., Mare Island — (Vallejo, P. O.) — Structures—Bureau Yards and Docks, Navy Dept., Wash., soon lets contract building structures for Submarine Base. About $110,000.

BIDS DESIRED

N. Y., Brooklyn — Shipbuilding Ways—Until Nov. 19, by Bureau Yards and Docks, Navy Dept., Wash., concrete and timber shipbuilding ways, pile foundations, at Navy Yard.

N. J., Woodbury—Post Office—Until Nov. 23, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Pa., Phila.—Tank and Tower—Until Nov. 5, by Bureau Yards and Docks, Navy Dept., Wash., building 150,000 gal. steel water tank and tower, concrete foundation, at Navy Yard. Noted Oct. 18.

Wash., D. C.—Dry Dock Crane—Until Nov. 26, by Bureau of Yards and Docks, Navy Dept., furnishing at Navy Yards, Norfolk, Va., cost, $125,000; Phila., Pa., $125,000; New York, N. Y., $100,000.

Va., Norfolk—Steel Tower—Until Nov. 5, by Bureau Yards and Docks, Navy Dept., Wash., building 200 ft. steel tower; also taking down, strengthening and rebuilding existing 200 ft. steel tower at Navy Yard. Noted Oct. 18.

W. Va., Charleston—Distributing System—Until Oct. 29, by Bureau Yards and Docks, Navy Dept., Wash., electric power distributing system. About $35,000.

W. Va., Charleston—Sewerage System—Until Oct. 29, by Bureau Yards and Docks, Navy Dept., Wash., installing at Naval Sta.

N. C., Chapel Hill — Post Office — Until Nov. 27, by J. A. Wetmore, superv. archt., treas. dept., Wash.

S. C., Charleston — Steel Tower—Until Nov. 5, by Bureau Yards and Docks, Navy Dept., Wash., building 300 ft. steel tower and reinforcing 2 existing steel towers at Navy Yard.

Federal Government Work (Continued)

Wyo., Basin—Post Office—Until Nov. 22, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Cal., San Diego—Dredging—Until Nov. 3, by U. S. Engr. Office, 725 Central Bldg., Los Angeles, dredging San Diego Harbor; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Chelsea — Hospital — Bureau Yards and Docks, Navy Dept., Wash., let contract building emergency hospital at Naval Hospital Reservation, to W. Crane, Hayward St., Cambridge, $269,900. Noted Oct. 18.

Mass., Hingham—Wall—Bureau of Yards and Docks, Navy Dept., Wash., received bids improvements to wall of slips at Naval Ammunition Depot; (a) net price, installation and removal of plant and apparatus, (b) unit price per man per day, (c) unit price per sq.ft., (d) unit price per pound for anchor bolts delivered, (e) unit price per cu.ft. Gunite in place, from Dewey Cement Gun Constr. Co., 836 Hamilton St., Allentown, Pa., (a) $1000, (b) $8, (c) 5c., (d) 32c., (e) $1.06; H. P. Converse & Co., 88 Broad St., Boston, Mass., cost plus %; H. P. Brown, 120 Liberty St., New York City, (a) $980, (b) $6 and $4, (c) 5½c., (d) $2.45.

★Conn., New London—Ordnance Buildings, etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract 3 ordnance store buildings and 1 machine shop at Submarine Base, to R. H. Arnold Co., 629 Woodward Bldg., Wash., D. C., $64,174. Noted Sept. 27.

★Conn., New London—Piers and Quay Wall—Bureau Yards and Docks, Navy Dept., Wash., let contract building at Naval Sta., to Robbins-Ripley Co., 50 Church St., New York City, $159,644. Noted Oct. 18.

Conn., New London—Power House and Machine Shop—Bureau of Yards and Docks, Navy Dept., Wash., received bids Oct. 22, power house and machine shop at Naval Sta., (work complete), from Bigelow & Nichols, 45 East 42nd St., New York City, $150,430; Durolithic Co., 460 Ellicott Sq., Buffalo, N. Y., $182,000; Casper Ranger Constr. Co., 20 Pine St., Holyoke, Mass., $193,680; T. J. Pardy Constr. Co., 15 Fairfield Ave., Bridgeport, Conn., $198,685. Noted Oct. 11.

★N. Y., New York—Bureau Yards and Docks, Navy Dept., Wash., let contract temporary storehouse for ordnance dock to J. Thatcher & Son, 60 Park Ave., Brooklyn, $101,483.

★N. J., Newark — Terminal Facilities—Bureau Yards and Docks, Navy Dept., Wash., let contract, including barracks, storehouses, etc., at Port Newark, to McArthur Bros., 120 Bway., New York City, at cost plus percentage basis, approximately, $15,000,000.

Pa., Phila.—Dispensary—Bureau Yards and Docks, Navy Dept., Wash., received low bids building at Navy Yard, (a) work complete, (b) alternate, from McCloskey & Bahl, 16 Thomson St., (a) $31,247, (b) $31,097; Evans Constr. Co., 9 South 18th St., (a) $33,500, (b) $33,500; Lam Building Co., 1001 Wood St., (a) $33,600, (b) $33,250. Noted Sept. 20.

Pa., Phila. — Heating System — Bureau Yards and Docks, Navy Dept., Wash., received low bids installing in foundry (work complete), from Enterprise Steam Heating Co., 600 North Howard St., Baltimore, Md., $68,680; Mathis Bros. Co., Archer Ave., and Canal St., Chicago, $74,435; C. J. Doyle, 2056 Pine St., $75,800. Noted Oct. 18.

★Md., Annapolis—Radio Tower—Bureau Yards and Docks, Navy Dept., Wash., let contract additional tower, to Austin Co., 1026 Bulletin Bldg., Phila., cost plus percentage, (supplemental agreement).

★Md., Indian Head — Laboratory—Bureau Yards and Docks, Navy Dept., Wash., let contract to Richardson & Burgess, Inc., 616 Colorado Bldg., Wash., D. C., $4500. Noted Oct. 18.

★Wash., D. C.—Condensers and Pumping Equipment—Bureau Yards and Docks, Navy Dept., Wash., let contract, furnishing at various navy yards, as follows: Items 3, 4, 5, 6, 9, 10, 12, 13, 16, 17, 18, 26, 27, 28, 29, 48, 49, 53, 54, 55, 56, to Alberger Pump & Condenser Co., 140 Cedar St., New York City, $48,300; Items 37, 38, 42, 43, to Westinghouse Electric & Mfg. Co., Hibbs Bldg., $38,242; Items 7, 15, 20, 22, 24, 25, 31, 32, 33, 35, 52, 57, to E. J. Smith, 30 Church St., New York City, $98,413; Items 19, 30, 36, 50, 51 to D'Oliver Centrifugal Pump & Machine Co., Morris Bldg., Phila., $32,960; Items 1, 8, 11, 46, 47, to A. S. Cameron Steam Pump Wks., 11 Bway., New York City, $23,560. Noted Oct. 4.

★Wash., D. C.—Mine Filling Plant—Bureau Yards and Docks, Navy Dept., Wash., let contract building at St. Juliens Creek, Va., to Boyle-Robertson Co., Evans Bldg., $296,981.

Wash., D. C. — Roadway — Bureau of Yards and Docks, Navy Dept., received bids repairs to roadway at Naval Hospital, from R. J. Beall, 612 14th St., $10,997 and R. A. Boiseau, 5909 Blair Rd., $16,400.

★Wash., D. C. (Anacostia)—Timber Seaplane Hangar—Bureau Yards and Docks, Navy Dept., let contract to Barney Hocke, Ahlers Constr. Corp., 110 West 40th St., New York City, $28,816.

★Va., Waynesboro — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to Olin Gerlach, Frostburg, Md., $33,105. Noted Sept. 13.

★Fla., Miami—Seaplane Pier — Bureau Yards and Docks, Navy Dept., Wash., let contract to St. Johns Constr. Co., Miami.

★Fla., Pensacola — Concrete Road and Culvert — Bureau Yards and Docks, Navy Dept., Wash., let contract to H. Monk, 125 South Palafox St., $16,800. Noted Oct. 18.

Miss., Gulfport—Emergency Camp—Bureau Yards and Docks, Navy Dept., Wash., received low bids, (a) work complete, (b) omitting pier, road, concrete walks, drains and electrical work, (c) construction of pier, (d) net price for work in (b), (e) electric system, from J. Griffith & Son, Chicago, (a) $349,000, (b) $29[illegible],000, (c) $9500, (d) $30,000, (e) $13,600; Paschen Bros., 111 West Washington St., Chicago, (a) $504,000, (b) $416,110, (c) $13,000, (d) $46,990, (e) $18,000; Doulutt & Williams, 1016 Hibernia Bank Bldg., New Orleans, (c) $15,900.

Miss., Gulfport—Emergency Hospital —Bureau Yards and Docks, Navy Dept., Wash., received low bids, (a) work complete, (b) gas radiation in lieu steam, from J. Griffith & Son, 112 West Adams St., Chicago, (a) $84,000, (b) $75,000; W. T. Hadlow & Co., Baldwin Bldg., Jacksonville, Fla., (a) $99,227; (b) $90,216; Paschen Bros., 111 West Washington St., Chicago, (a) $136,000, (b) $120,000. Noted Oct. 18.

★Mich., Bad Axe — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to Northern Constr. Co., 421 Milwaukee St., Milwaukee, Wis., $45,628. Noted Oct. 18.

★Ill., Flora—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract, on Main St., to H. F. Pixley, 1st Natl. Bank.

★Ill., Great Lakes—Radio Building—Bureau Yards and Docks, Navy Dept., Wash., let contract distant control radio building to O. Sandstrom, 127 Genesee St., Waukegan, $4173.

★Cal., Mare Island—(Vallejo P. O.)—Paint Shop—Bureau Yards and Docks, Navy Dept., Wash., let contract to Knowles & Matthewson, Call Bldg., San Francisco, $56,970.

★Cal., San Francisco—Wharf—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract rebuilding west wing of wharf at Quarantine Sta., Angel Island to Thomson Bridge Co., 102 Main St., $25,900; time, 5 months. Noted Oct. 11.

★Cal., Tiburon—Building—Bureau Yards and Docks, Navy Dept., Wash., let contract building quarters for marine guard, to C. L. Wold & Co., 75 Sutter St., San Francisco, $8498. Noted Oct. 11.

★H. T., Kuahua—Mine Storage Building —Bureau Yards and Docks, Navy Dept., Wash., let contract, steel and frame, at Naval Ammunition Depot, (work complete), to Walker & Young, 2 Merchant St., Honolulu, $53,000. Noted Oct. 11.

★P. R., El Cayey—Radio Towers—Bureau Yards and Docks, Navy Dept., Wash., let contract building 3 600 ft. radio towers to Pittsburg Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., $233,985. Noted Oct. 11.

MISCELLANEOUS

Proposed Work

Elevated Railway — Brooklyn, N. Y.—Brooklyn Rapid Transit Co. plans to extend company's lines into Long Island City beginning at 2nd Ave., and 59th St., Manhattan, across Queensboro bridge, pass through Dutch Kills industrial basin and by way Greenpoint Ave. bridge reach Manhattan Ave., Brooklyn, extending to Bedford Ave., thence to Brooklyn plaza of Williamsburg bridge. F. S. Williams, 85 Clinton St., pres.

Retaining Wall—Jersey City, N. J.—Bd. Educ. plans, in rear of Dickinson High School. About $20,000.

Pier—Newark, N. J.—Bd. Wks. Comrs. plan to build new 1200-ft. pier at Port Newark Terminal. About $450,000.

Elimination Grade Crossings—Paterson, N. J.—Court of Appeals has sustained order of Pub. Utility Comrs. to compel Erie R.R. to remove Paterson grade crossings. About $6,000,000.

Pier — Phila., Pa. — (Official) — Dept. Wharves, Docks & Ferries, 552 Bourse Bldg., rejected bids building pier on Delaware River at Penn Treaty Park. G. S. Webster, dir. Noted Sept. 13.

Fencing Railway — Danville, Va. — See "Industrial Works."

Harbor Extension,, Etc.—Lorain, O.—J. C. Cromwell Steel Co. and National Tube Co. plans to extend Lorain Harbor and dredge Black River.

Dam and Spillway—Traverse City, Mich.—City plans to rebuild Boardman River dam and spillway, recently destroyed under uncertain circumstances. Loss, $50,000.

Transmission Line—Muscatine, Ia.—Iowa Ry. & Light Co. has been granted 25-year franchise by Bd. of State R.R. Comrs. to build and operate electric transmission lines on certain road and highways in Muscatine Co. R. S. Cook, Cedar Rapids, genl. mgr.

Dam, Etc.—Lovell, Wyo.—Lovell Canal Co. authorized $80,000 bond issue to build dam in Shoshone River. Ditches will also be built.

Dam—Windsor, Colo.—B. H. Eaton Ditch Co. plans to build 112-ft. rein.-con. diversion dam on Poudre River, 2 mi. northwest of Windsor.

Dam—Raton, N. M.—Maxwell Ditch & Reservoir Co. voted to spend $130,000 to rebuild Hebron Dam. J. Vail, pres.

Transmission Line — Cataldo, Idaho — Washington Water Power Co., of Spokane, plans to build 45-mi. electric transmission line from Cataldo via Fourth July Canyon to Cœur d'Alene. About $200,000. C. F. Uhden, ch. engr.

Transmission Line—Yuma, Ariz.—Southern Sierras Power Co., 611 Symes Bldg., Denver, Colo., plans to build electric transmission line from Yuma to mines of New Cornelia Copper Co. at Ajo, about 160 mi. C. O. Poole, 1st Natl. Bank Bldg., Riverside, Cal., ch. engr.

BIDS DESIRED

Pumping Machinery—Brockton, Mass.—Until Nov. 15, by Sewerage Comrs., City Hall. A. F. Nordbeck, chn.; advertised in this issue.

Piers—Buffalo, N. Y.—(Official)—Until Oct. 30, by Dept. Pub. Wks., building 4 new piers at Michigan Ave. viaduct, over New York Central R.R. tracks. A. W. Kreinheder, comr.

Duct Line—New York, N. Y.—Until Nov. 7, by Pub. Serv. Comn., 120 Bway., duct line for 7th Ave.-Lexington Ave. Rapid Transit R.R., consisting of 32 ducts extending under Westchester Ave. and Bronx

River Channel Improvements—Columbus, O.—Until Nov. 13, by G. A. Borden, dir. pub. serv., widening Scioto River, also building levees, bridges, etc.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Retaining Walls — Boston, Mass.—(Official)—See "Streets and Roads."

★Sea Wall — Quincy, Mass. — Com. on Waterways and Pub. Lands let contract, on Houghs Neck, Manet Ave., to D. F. Crowley, 658 Adams St., $20,000. Noted Aug. 30.

★Piers and Bulkheads — Clifton, S. I., N. Y.—See "Industrial Works."

★Garbage Incinerator — Waukegan, Ill.—(Official)—City let contract to J. W. Stokes, Chicago, $10,500. Noted Oct. 4.

★Foundations—Cleveland, O.—Bd. Control let contract building rein.-con. foundations for extension to lighting plant to Drummond & Miller Co., Electric Bldg., $67,000.

★Dam—Las Animas, Colo.—Bent Co. let contract building on south fork Mud Creek, 2000 ft. long, 50 ft. high, to Slick Bros. Constr. Co., Idaho Bldg., Boise, Idaho.

★Tunnel, Etc.—Los Angeles, Cal.—City let contract concrete-lined tunnel and rein.-con. and brick power house to L. Callahan, 2324 Michigan Ave., $28,793.

PAVED ROADS FOR KANSAS

With the new Kansas Road Law six months old, practically every county has organized or is preparing plans for 365-day roads. The five-year campaign for hard surfaced highway, in a state that has lagged for years, is making good headway, according to J. Frank Smith, president of the Kansas Good Roads Association to take advantage of the liberal provisions of the new state law. Most of the permanent roads contemplated—not ones that are made on paper or with a paint brush circle on telegraph poles—will receive Federal aid, which pays 15 per cent. of the cost of the road. If the present activities can be kept going it is believed that before the end of the five-year campaign fully five thousand miles of paved roads will be financed, which will include six permanent highways across the state.

These activities for hard roads are reported from these counties:

Cloud—A petition for a brick road across the county on the White way and a concrete road across the county on the Midland Trail.

Shawnee—Two petitions, one for a brick road from Topeka to Douglas County line, another concrete road between same points over another route. A paved road from Topeka to Dover, twenty miles. A petition has also been started to pave the Capital City Highway across the county.

Jackson—Circulating petition to pave Capital City Highway across the county.

Saline—Pave the Golden Belt and Meridian Road across the county. The program is to pave twenty miles a year until the campaign is finished.

Reno—Petition circulating to ask county commissioners to call an election for bonds to build 154 miles of brick road.

Allen—Promoting campaign to vote county bonds for 150 miles of paved roads. Election will probably be held before spring.

Butler—Brick road from Eldorado to Augusta.

Douglas—Petition been signed to concrete the Midland Trail.

Mitchell—Concrete road from Beloit to Simpson and brick road west from Beloit to county line.

Brown—Pave Ocean-to-Ocean Highway and King of Trails.

Bourbon—Have built 25 miles of rock road under new law.

Barton—Except one township; petition signed to brick old Santa Fe Trail.

Clay—Brick road north from Clay Center to county line.

Washington—Plans a complete county system.

Montgomery—Plans 150 miles of gravel road.

Labette—Will build 30 miles of gravel road a year until entire county system is finished.

Sedgwick—Brick road from Wichita east to county line.

Leavenworth—Brick Midland Trail.

FINISHING THE PAVING JOB AT CORPUS CHRISTI

About 12 miles, or 200 city blocks, have been paved, additional curbing has been built and storm sewers constructed on all the paved street, and practically all the street railway tracks have been relaid during the past four years in Corpus Christi, Texas, at a cost of approximately $1,250,000. In addition to this work the city is now completing what is known as the "improvements" which involved building concrete balustrades, retaining walls and terracing certain property.

Working under the plan of the city paying one-fourth of the cost and the abutting property owners three-fourths, the city in 1912 voted $150,000 for its share of the work. In 1914 it voted $50,000. In 1916, $100,000, making a total of $300,000 for street paving.

INDIANA HIGHWAY WORK

Highway building will be accentuated by the war, rather than stopped, state officials announce. Plans have been completed for the building of eight hundred miles of paved roads next year, at an estimated expenditure of nearly $3,000,000. One road will extend from the Great Lakes to the Ohio river and three roads will traverse the state from the Ohio to the Illinois lines. The Lincoln highway and the Dixie highway will be improved.

STATE HIGHWAY, CALIFORNIA

Bids were received by State Highway Comn., 505 Forum Bldg., Sacramento for constructing state highway in Marin Co., from (A) Edmund Tracy, Sheldon Bldg.; (B) F. Rolandi, 550 Montgomery St.; (C) Palmer & McBryde, Hooker & Lent Bldg., all of San Francisco; (D) A. J. Fairbanks, Willits, $228,296. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
97,000 cu.yd. excavation without classification	$1.00	$0.85	$0.95
738 lin.ft. 12-in. corrugated metal pipe	.75	.60	.80
746 lin.ft. 15-in. corrugated metal pipe	1.00	.70	.90
338 lin.ft. 18-in. corrugated metal pipe	1.50	.80	1.00
368 lin.ft. 24-in. corrugated metal pipe	2.00	1.00	1.10
78 lin.ft. 30-in. corrugated metal pipe	2.50	1.00	1.50
795 cu.yd. portland cement concrete, Class "A" (culverts and monorails)	6.00	15.00	15.00
15,700 cu.yd. portland cement concrete for pavement, Class "A"	4.00	4.80	4.90
195,000 sq.ft. reinforcement for pavement per 100 sq.ft	.50	1.50	.30
5,225 lin.ft. guard rail	.70	.50	.50
201 each monuments	7.00	1.00	1.50
Extended totals	$173,347	$177,155	$186,626

BARGE CANAL WORK, ALBANY, N. Y.

Contract No. 164

Bids were received by W. W. Wotherspoon, supt. pub. wks., Capitol, Oct. 9, for completing construction of canal at certain locations between Lyons and Newark, also building retaining dam at Macedon, from (a) Lathrop, Shea & Henwood, Ellicott Sq., Buffalo; (b) Mohawk Dredge and Dock Co., Inc., Herkimer. The unit bids were as follows:

	A	B
130,780 cu.yd. excavation	$0.80	$1.29
2M.f.b.m. sheeting and bracing	60.00	75.00
54,600 cu.yd. forming embankment, 1st class	.18	.20
4,200 cu.yd. forming embankment, 2nd class	.14	.15
2,120 cu.yd. lining	2.40	2.00
2,550 lin.ft. foundation piles	.80	.45
4,080 sq.ft. furnishing ¼-in. steel sheet piling	1.15	1.20
2,550 sq.ft. furnishing ⅜-in. steel sheet piling	1.70	1.69
13,030 sq.ft. driving steel sheet piling	.25	.20
6,400 sq.ft. pulling steel sheet piling	.25	.25
1,010 cu.yd. second-class concrete	10.00	11.00
4,700 cu.yd. wash wall	2.70	3.50
37 cu.yd. relaying wash wall	1.25	1.50
310 cu.yd. fourth-class rip-rap	4.50	3.75
1,610 lin.ft. wooden fence	.45	.35
Concrete culvert (lump sum)	300.00	200.00
Cofferdams, pumping, bailing and draining (lump sum)	800.00	2,000.00
2 removing bridge superstructures	10.00	100.00
Extended totals	$159,848	$228,947

CALIFORNIA HIGHWAY WORK

At a recent meeting of the representatives from fourteen counties with the California Highway Commission at Sacramento, Cal., it was agreed to accept the plan of the commission for the expenditure of $3,000,000 appropriated by the State for the construction of seven roads. The conference decided to proceed with the work as far as the funds would permit, each county bearing its share of the expense, as far as it could be done.

The seven proposed roads have a length of 680 mi. and the estimated cost is $8,900,000. With the State's appropriation of $3,000,000 and a like amount to be provided by the counties, there is still a deficit to be cared for later. For the present the construction of the roads will proceed on the plan of dividing the expense equally between the counties and the State, using the $6,000,000 as a basis.

The following are the figures tentatively decided upon by the Commission, which the counties will be asked to approve:

Trinity lateral 102 mi., estimated cost, $1,775,000; State's portion, $393,240; county's share, $781,760.

Pacheco Pass 83.45 mi., estimated cost, $1,618,413; State's portion, $541,650, county's share, $1,076,764.

El Portal 32.45 mi., estimated cost, $533,554; State's portion, $178,560, county's share, $354,997.

Coalinga 98.25 mi., estimated cost, $1,502,538; State's portion, $448,320, county's share, $999,678.

Cholame 91.22 mi., estimated cost, $1,339,596; State's portion, $448,320, county's share, $891,275.

San Bernardino to Barstow, 76.33 mi., estimated cost, $534,112; State's portion, $178,779, county's share, $355,342.

San Bernardino to Yuma 195.86 mi., estimated cost, $2,260,462; State's portion, $756,510, county's share, $1,503,949.

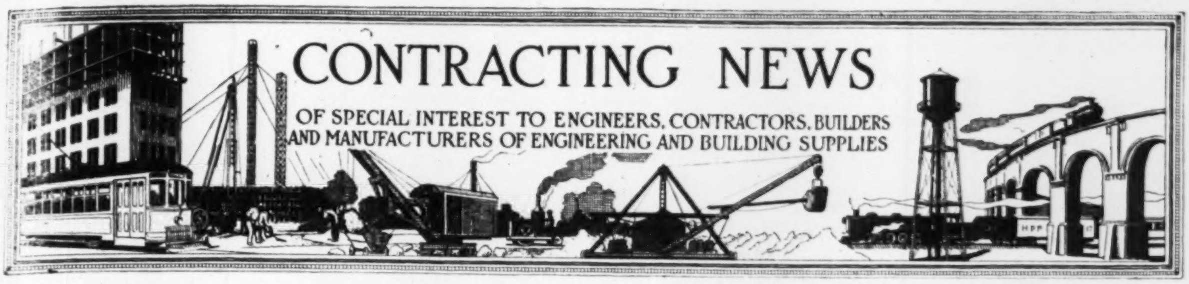
The Records of the **Bridge Builders and Structural Society,** as collected by its secretary, show that during the month of September, 1917, twenty-nine (29) per cent. of the entire capacity of the bridge and structural shops of the country was contracted for.

MISSOURI PUTS CONVICTS ON ROADS

The use of convict labor for road work was begun recently in Missouri by the State Highway Department, and the first camp has been established at Mineola. The Mineola special road district had voted bonds to pay half the cost of constructing the eight-mile link of the National Old Trails road within the district. Finding it impossible to secure local labor, the district induced the county court to make application for 30 men from the state prison. Of these, 25 are employed on the road and five for cooking, laundry and camp work. The road district pays the State Prison Board $1.25 per day for each man actually engaged in road work, and the State Highway Department will reimburse the district for half this expense as the work progresses. The $1.25 covers the cost of housing, boarding and transporting the entire camp, and also includes the salary of a foreman supplied by the prison board, and the services of the cooks and other men required to maintain the camp. Only "honor men" are employed. They work without guards and do not wear prison uniform. To obtain this labor, application must be made through the county court to the State Highway Department and the State Prison Board.

DETROIT BELT DRIVEWAY COMPLETED

Opening of the outer-belt drive of the Wayne County concrete highway system was celebrated at Detroit, Oct. 11. This marked the completion of a continuous line of about 94 miles of hard road, skirting the boundaries of the county and intersecting ten radial highways which center at Detroit.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by **heavy type**; declines by *italics*.

PIG IRON

Below are the present quotations with a comparison of a month and a year ago.

	Nov. 1, 1917	One Month Ago	One Year Ago
CINCINNATI			
No. 2 Southern foundry	$33.00	....	$18.90
No. 2 Northern foundry	33.00	....	21.76
NEW YORK			
No. 2X Northern foundry	34.25	....	21.50 to 22.50
No. 2 plain Northern foundry	33.75	....	21.00 to 21.50
No. 2 Southern foundry†	37.25	....	21.50 to 22.00
BIRMINGHAM			
No. 2 Southern foundry	33.00	....	16.00
CHICAGO			
No. 2 Northern foundry	33.00	....	22.00 to 22.50
No. 2 Southern foundry	37.00	....	....
PITTSBURGH			
Bessemer iron*	36.30	$36.30	24.95
Basic iron*	33.00	33.00	20.95

*These prices include the freight charge from the valley to the Pittsburgh district. †Delivered Tidewater, New York.

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per 100 lb. f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	Nov. 1, 1917	One Year Ago	Nov. 1, 1917	One Year Ago
Standard bessemer rails	$38.00	$33.00	$38.00	$33.00
Standard openhearth rails	40.00	35.00	40.00	35.00
Light rails, 8 to 10 lb.	83.00	50.00	*83.00*	43.00
Light rails, 12 to 14 lb.	82.00	49.00	*82.00*	42.00
Light rails, 25 to 45 lb.	75.00	47.00	*75.00*	40.00

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh				
	Nov. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco
Standard railroad spikes, $\frac{9}{16}$-in. and larger	*$5.00* to 7.00	$2.65	$5.00	$6.45	$7.25*
Track bolts	7.00 to 8.00	3.25	6.25	Premium	8.80*
Standard section angle bars	*3.50*	2.00	4.50	Premium	4.65*

*Per 100 lb.

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

	Material	7 In. x 9 in. by 8 Ft. 6 In.	6 In. x 8 in. by 8 Ft.
New York	Yellow Pine	$1.30	$1.06 to 1.11
St. Louis	Plain No. 1 White Oak	1.00	.75
Chicago	White Oak	.97	.82
Chicago	Plain Creosoted	1.30	1.15
San Francisco	Green	**1.08**	**.77**
San Francisco	Creosoted	**1.97**	**1.49**

PIPE

PIPE—The following discounts are for carload lots f.o.b. Pittsburgh, basing card in effect July 2, 1917, for iron and May 1 for steel:

	Steel			Iron	
Inches	Black	Galvanized	Inches	Black	Galvanized
BUTT WELD					
¾ to 3	49%	35½%	¾ to 1½	33%	17%
LAP WELD					
2	42%	29½%	2	26%	12%
2½ to 6	45%	32½%	2½ to 4	28%	15%
7 to 12	42%	28½%	4½ to 6	28%	15%
13 and 14	32½%	....	7 to 12	25%	12%
15	30%	....			
BUTT WELD, EXTRA STRONG PLAIN ENDS					
¾ to 1½	47%	34½%	¾ to 1½	33%	18%
2 to 3	48%	35½%			
LAP WELD, EXTRA STRONG PLAIN ENDS					
2	40%	28½%	2	27%	14%
2¼ to 4	43%	31½%	2½ to 4	29%	17%
4½ to 6	42%	30½%	4½ to 6	28%	16%
7 to 8	38%	24½%	7 to 8	20%	8%
9 to 12	33%	19½%	9 to 12	15%	3%

From warehouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded	38%	42%	34.27%
3½ to 6 in. lap welded	18%	38%	21.27%
7 to 12 in. lap welded	10%	35%	21.27%

	Galvanized		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded	22%	27%	19.27%
3½ to 6 in. lap welded	List	18%	13.27%
7 to 12 in. lap welded	List + 20%	20%	6.27%

Malleable fittings, Class B and C, from New York stock sell at 5 and 5% from list prices. Cast iron, standard sizes, 34 and 5%.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York						
	Nov. 1, 1917	1 Month Ago	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4 in.	*$59.50*	$68.50	$34.50	*$53.50*	*$52.00*	*$61.00*	*$57.00*
6 in. and over	*56.50*	65.50	31.50	*50.50*	*49.00*	*58.00*	*54.00*

Gas pipe and 16-ft. lengths are $1 per ton extra.

CLAY DRAIN TILE—The following prices are per 1000 lin.ft.:

	New York					
Size, In.	Nov. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$23.00	$18.40	$15.00	$26.25	$21.55
4	51.00	32.45	20.70	18.00	34.75	30.60
5	65.00	45.00	28.75	23.00	48.75	....
6	90.00	56.55	40.25	27.00	67.50	50.02
8	130.00	98.50	74.75	55.00	....	90.09

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York					
Size, In.	Nov. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$0.093	$0.0725	.....	$0.09	$0.75	$0.1032
4	.093	.0725	.....	.10	.10	.1032
5	.1395	.12	.....	.135	.12	.1548
6	.1395	.12	$0.12	.15	.15	.1548
8	.217	.165	.165	.21	.225	.215
10	.3255	.24	.23	.315	.30	.301
12	.4185	.30	.33	.405	....	.387
15	.558	.405	.50	.54	.40	.559
18	.775	.57	.75	.75	.75	.731
20	.93	.675	.90	.90	.96	.86
22	1.24	.90	1.13	1.20	....	1.118
24	1.395	.975	1.28	1.35	1.375	1.29
27	2.08	1.665	1.30	....	....	1.935
30	2.304	2.035	1.70	....	....	2.365
33	3.06	2.625	2.25	....	....	3.05
36	3.485	2.94	2.50	....	....	3.44

	Boston	St Paul	Kansas City	Denver	Los Angeles	Seattle
3	$0.099	$0.084	$0.10	$0.09	$0.06	$0.075
5	.1485	.126	.135	.18	.10	.225
8	.231	.175	.18	.25	.18	.4125
12	.4455	.315	.36	.40	.32	1.75
24	1.485	1.35	1.35	1.35	1.125	.....
36	3.69	2.83	3.25	3.00	.....	.....

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices in tank cars 8000 gal. minimum f.o.b. places named:

	Nov. 1, 1917 Gallon	One Month Ago Gallon
St. Louis, 40-50%	**6½c.**	6c.
Chicago, 15-20% asphalt	6½c.	6½c.
Chicago, dust layer	8½c.	8½c.
Chicago, binder	12½c.	12½c.
Dallas, 40-50%	7c.	7c.
Dallas, 60-70%	8c.	8c.
Dallas, 75-90%	9c.	9c.
San Francisco, 75-95% asphalt	**$1.92** bbl. (42 gal.)	$1.90 bbl.

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	$30.00	....
New York	Mexican	28.00	**$20.00**
Chicago	Mexican	**25.00**	21.00
St. Louis	Texaco or Mexican	22.50	19.50
St. Louis	Stanolind	21.00	17.00
San Francisco	California	16.50	13.50
Dallas	Texaco and Mexican	....	25.00
Seattle		18.00	....
Denver	Trinidad	31.00	....
Kansas City	Trinidad	26.37	....
St. Paul	Trinidad	25.40	....

PAVING STONE—

		Nov. 1, 1917
New York	Manhattan	$2.50 sq.yd.
	Other boroughs	2.25 sq.yd.
New York	5-in. granite	2.55 sq.yd.
Chicago	About 4x8x4 dressed	2.25 sq.yd.
	About 4x8x4 common	1.80 sq.yd.
St. Paul	Sandstone	1.65 sq.ft.
San Francisco	Basalt block 4x7x8	57.75 per M
Kansas City	Limestone	2.15 sq.yd.
Boston	5-in. granite	2.55 sq.yd.

FLAGGING—

		Nov. 1, 1917
New York	Bronx	$0.17 sq.ft.
	Manhattan	.18 sq.ft.
	Queens, 5 ft. square	.19 sq.ft.
	5x20-in. cross walk	.30 sq.ft.
Chicago	18 in. wide	.75 lin.ft.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$2.00
New York	4	16	2.25
Chicago	4	16	1.85
Chicago	City specifications		1.70
St. Louis	3½	16	1.80
St. Louis	4	16	2.03
Seattle	4	16	2.35
Boston	4	20	....*
Kansas City	4	16	2.50
St. Paul	3½	16	2.00
San Francisco	3	16	2.15
San Francisco	3½	16	2.26
San Francisco	4	16	2.57

*Market unstable account of lumber situation.

CURBING—Prices per linear foot are as follows:

New York	5 x 16	$0.45
	5 x 20	.50
Chicago	6 x 18	.60
St. Louis	5x18 square edge	.72
San Francisco	5 x 16	.75
	5 x 20	.85

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel 1½ In. Nov. 1, 1917	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Nov. 1, 1917	Gravel ¾ In. One Yr. Ago	Sand Nov. 1, 1917	Sand One Yr. Ago
New York	$1.40	$1.00	$1.50	$1.10	$0.50	$0.50
St. Louis	1.11	.70	1.11	.70	1.11	.60
Chicago	1.40	1.00	1.40	1.00	1.40	.75
Dallas	1.50	....	1.50	....	1.35	....
San Francisco	1.00	1.00	1.00	1.00	1.00	1.00
Los Angeles	.85	....	.85	....	.35	....
Denver	1.40	....	1.40	....	.95	....
Seattle	.80	....	.80	....	.80	....
Boston	1.50	....	1.60	....	.80	....
Kansas City	2.15	....	2.00	....	.60	....
St. Paul	1.10	....	1.40	....	.50	....

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. Nov. 1, 1917	1½ In. One Year Ago	¾ In. Nov. 1, 1917	¾ In. One Year Ago
New York	*$1.15 to 1.25	$0.90	*$1.25 to 1.35	$1.00
Chicago	1.40	.85	1.40	.95
St. Louis	1.35	1.00	1.35	1.00
Dallas	1.41	....	1.40	....
San Francisco	1.00	1.00	1.00	1.00
Los Angeles	.95	....	1.00	....
Denver	1.40	....	1.40	....
Seattle	1.10	....	1.10	....
Kansas City	1.60	....	1.70	....
Boston	1.40	....	1.40	....
St. Paul	1.00	....	1.10	....

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$16.50	....	$2.10	....
Chicago	15.00	12.00	1.90	1.20
St. Louis	13.00		....	1.30
Dallas	20.00	15.00	....	....
San Francisco	*16.50*	....	....	1.65

Note—Refund of 10c. per bag, amounting to $2 per ton.

ROSENDALE NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., including bags:

New York	$1.15

30c. allowed for bags.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags:

	Nov. 1, 1917	One Month Ago	One Year Ago
New York	$2.22	$2.22	$1.77
Jersey City	2.16	2.16	1.60
Boston	2.37	2.77	1.92
Chicago	2.21	2.21	1.86
Pittsburgh	2.31	2.31	1.81
Cleveland	2.44	2.44	1.94
Detroit	2.40	2.40	1.95
Indianapolis	2.38	2.38	1.99
Toledo	2.40	2.40	1.99
Milwaukee	2.33	2.33	1.98
Minneapolis	2.48	2.48	2.13
Duluth	2.51	2.51	2.06
Peoria	2.33	2.33	1.98
Cedar Rapids	2.48	2.48	2.09
Davenport	2.40	2.40	2.04
St. Louis	2.45	2.45	1.85
Denver	3.20	3.20	...
San Francisco	2.30	2.30	2.30
Dallas	2.40	2.40	...
Los Angeles	2.30	2.30	...
Kansas City	2.44	2.44	...
St. Paul	2.58	2.58	...
Seattle	2.65	2.65	...

TRIANGLE MESH REINFORCEMENT—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.89	$0.92	$0.93	$0.94	$1.06	1.27
049	0.049	1.13	1.18	1.18	1.20	1.34	1.63
068	0.068	1.42	1.47	1.49	1.50	1.68	2.04
093	0.093	1.82	1.89	1.91	1.92	2.17	2.62
126	0.126	2.31	2.39	2.42	2.44	2.74	2.96
153	0.153	2.75	2.86	2.88	2.91	3.27	3.32
180	0.180	3.16	3.27	3.31	3.34	3.76	....
245	0.245	4.17	4.33	4.36	4.41	4.96	5.65
287	0.287	4.82	5.00	5.04	5.10	5.72	6.94
336	0.336	5.56	5.80	5.85	5.92	6.66	....

PLAIN 4-IN. x 8-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
036P	0.036	.69	.71	.72	.73	.82	
053P	0.053	.97	1.01	1.02	1.03	1.16	
072P	0.072	1.26	1.30	1.32	1.33	1.50	
097P	0.097	1.62	1.68	1.70	1.71	1.93	
049R	0.049	.97	1.01	1.02	1.03	1.15	1.97
067R	0.067	1.26	1.30	1.32	1.33	1.50	
089R	0.089	1.62	1.68	1.70	1.71	1.93	

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and [illegible] in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized runs about 10% higher than plain.

EXPANDED METAL LATH—Prices per 100 yd. for painted are as follows:

Carload

Gage	Weight	New York Nov. 1, 1917	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$31.00	$18.00	$31.00	$34.00	$29.00	$3[illegible]
26	250	32.05	19.00	32.00	35.00	30.25	
25	300	33.15	20.00	33.00	....	....*	35.00
24	340	34.25	21.00	34.00	37.00	33.00	36.00
22	450	36.45	24.00	36.00	....	....*	

*Not carried,

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING—The following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Shipment	Warehouse New York Nov. 1, 1917	Warehouse New York One Year Ago	Warehouse St. Louis	Warehouse Chicago	Warehouse San Francisco	Warehouse Dallas
¾ and larger	*	$5.10	$3.35	$2.90†	$4.50	$6.50	$4.75
⅝	*	5.15	3.45	2.95†	4.55	6.55	4.80
½	*	5.20	3.50	3.00†	4.60	6.60	4.85
⅜	*	5.35	3.75	3.15†	4.75	6.75	5.00
¼	*	5.60	4.10	3.40†	5.00	7.00	6.00

*Mill quotations on actual specifications.

†St. Louis: Nominal Government price.

ROLLED FROM RAILS

	Dallas		Dallas
¾ in. and larger	$4.75	⅜	$5.00
⅝	4.80	¼	6.00
½	4.85		

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common Nov. 1, 1917	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$8.25	$8.25	$7.75	$32.00	$38.00
Boston	13.25	13.25	....	....	25.00
Chicago	8.00	8.00	6.00	....	
St. Louis, salmon	8.00	8.00	7.00	....	
St. Louis, selected	10.00	10.00	10.00	....	
Denver	8.00	8.00	....	....	
Los Angeles	7.50	6.50	....	....	28.00
San Francisco	10.00	10.00	10.00	....	....
Dallas	8.00	8.00	....	22.00	22.50
Kansas City	11.00	11.00	....	....	23.00
St. Paul	8.70	8.70	....	....	
Seattle	9.00	9.00	....	....	28.75

HOLLOW TILE—Hollow building tile price per block in cents

	New York Nov. 1, 1917	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4x12x12	$0.0925	$0.075	$0.079	$0.054	$0.0825	$0.075
6x12x12	.1295	.104	.120	.066	.11	.10
8x12x12	.15725	.1266	.135	.09	.1275	.14
10x12x12	.185	.149	.1607	.15	.20	.16
12x12x12	.23125	.1875	.19285	.18	.22	.21

	4x12x12	8x12x12	12x12x12
Boston	$0.0957	$0.171	$0.2266
Kansas City	.058	.112	.1575
Denver	.11	.20	.30
Los Angeles	.055	.10	.165
Seattle	.06	.10	.16
St. Paul	.055	.138	.153

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Pittsburgh	New York Nov. 1, 1917	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in.	$3.00	$5.25	$3.85	$5.05	$5.00	$7.75	$6.00
Channels, 3 to 15 in.	3.00	5.25	3.25	5.05	5.00	7.75	6.00
Angles, 3 to 6 in., ¼ in. thick	3.00	5.25	3.25	5.05	5.00	7.75	6.00
Tees, 3 in. and larger	3.00	5.30	3.40	5.05	5.05	7.75	6.00
Plates	3.25	10.00	4.00	7.05	*7.00*	10.50	9.00

RIVETS—The following quotations are per 100 lb.:

STRJCTURAL

	Mill, Pittsburgh	Warehouse New York Nov. 1, 1917	Warehouse New York One Year Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse San Francisco	Warehouse Dallas
¾ in. and larger	$5.25	$7.00	$5.25	$5.50	$5.55	$7.15	$8.40
CONE HEAD BOILER							
¾ in. and larger	5.35	7.10	5.35	5.60	5.65	7.25	8.50
⅝ and 11/16	5.50	7.25	5.50	5.75	5.80	7.40	8.65
½ and 9/16	5.85	7.60	5.85	6.10	6.15	7.75	9.00

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.c.l.	2-Ply c.l.	2-Ply l.c.l.	3-Ply c.l.	3-Ply l.c.l.
No. 1 grade	$1.15	$1.40	$1.45	$1.60	$1.75	$1.90
No. 2 grade	1.10	1.25	1.25	1.40	1.50	1.65

Asbestos asphalt-saturated felt (14 lb. per square) costs $6.50 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $1.85 per roll in carload lots and $2.10 for smaller quantities.

Shingles, red and green slate finish, cost $4.75 per square in carloads, $5 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York or Chicago:

	Carload Lots	Less Than Carload Lots
Tar felt (14 lb. per square of 100 sq.ft.)	$61.00	$62.00
Tar pitch (in 400-lb. bbl.)	15.00	16.50
Asphalt pitch (in barrels)	29.00	30.50
Asphalt felt	60.00	62.00

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

Blue Annealed	Large Lots, Pittsburgh	St. Louis	Chicago	*San Francisco	New York Nov. 1, 1917	New York One Yr. Ago
No. 10	*6.00*	*8.05*	*8.00*	11.00	10.00	4.25
No. 12	*6.05*	*8.10*	*8.05*	11.05	10.05	4.30
No. 14	*6.10*	*8.15*	*8.10*	11.10	10.10	4.35
Black						
Nos. 18 and 20	*5.80*	*9.35*	*8.30*	*10.80*	*9.30*	3.80
Nos. 22 and 24	*5.85*	*9.40*	*8.35*	*10.85*	*9.35*	3.85
No. 26	*5.90*	*9.45*	*8.40*	*10.90*	*9.40*	3.90
No. 27	*5.95*	*9.50*	*8.45*	*10.95*	*9.45*	3.95
No. 28	*6.00*	*9.55*	*8.50*	*11.00*	*9.50*	4.00
Galvanized						
No. 10	*6.50*	*8.35*	*8.70*	....	10.80	....
No. 12	*6.60*	*8.50*	*8.70*	*11.40*	10.00	4.50
No. 14	*6.60*	*8.65*	*8.70*	*11.40*	10.00	4.50
Nos. 18 and 20	*6.90*	*8.95*	*9.00*	*11.70*	11.25	4.90
Nos. 22 and 24	*7.05*	*9.10*	*9.15*	*11.85*	*10.55*	5.30
No. 26	*7.20*	*9.25*	*9.20*	*12.00*	*10.70*	5.45
No. 28	*7.50*	*9.55*	*9.50*	*12.30*	*11.00*	5.75

LINSEED OIL—These prices are per gallon:

	New York		Cleveland		Chicago	
	Nov. 1, 1917	One Year Ago	Nov. 1, 1917	One Year Ago	Nov. 1, 1917	One Year Ago
Raw in barrels	*$1.16*	$0.88	*$1.15*	$0.97	*$1.17*	$0.92
5 gal. cans	*1.26*	.98	*1.25*	1.07	*1.27*	1.02

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red				White	
	Nov. 1, 1917		1 Year Ago		Nov. 1, 1917	1 Yr. Ago
	Dry	In Oil	Dry	In Oil	Dry and In Oil	Dry and In Oil
100-lb. keg	12.25	12.50	10.50	11.00	12.00	10.50
25 and 50-lb. kegs	12.50	12.75	10.75	11.25	12.25	10.75
12½-lb. keg	12.75	13.00	11.00	11.50	12.50	11.00
1 to 5-lb. cans	14.25	14.50	12.50	12.50	14.50	12.50

LUMBER*—Price per M in carload lots:

Rough Douglas Fir, No. 1 Common—More than carload lots in San Francisco:

Size in Inches	15 Ft. and Under	16 to 24 Ft.	25 to 32 Ft.
3 and 4x4	$24.00	$25.50	....
3 and 4x6 and 8	24.00	24.50	$25.50
6x6 and 8x8	24.50	25.50	25.50
3 and 4x10	24.00	25.50	26.50
6 and 8x10	25.00	26.00	27.00
2 and 4x12	24.00	25.50	26.50
6 and 8x12	25.50	26.50	26.50
10 and 12x12	25.00	25.00	27.00
3 and 4x14	25.00	27.00	28.00
6 and 8x14	26.50	27.50	27.50
7 and 9x14	27.50	28.50	28.50
10 and 12x14	26.00	26.00	28.00

Square Edge and Sound Green

	Southern Pine				Yellow Pine	
	New York		Chicago		St. Louis	
	20 Ft. and Under	22-24 Ft.	20 Ft. and Under	22-24 Ft.	20 Ft. and Under	22-24 Ft.
3x 4 to 8x 8	$33.75	$35.75	$31.75	$33.75	$28.75	$30.75
3x10 to 10x10	34.75	38.75	32.75	34.75	29.75	31.75
3x12 to 12x12	40.75	42.75	38.75	40.75	35.75	37.75
3x14 to 14x14	42.75	44.75	40.75	42.75	37.75	39.75
3x16 to 16x16	45.75	47.75	43.75	45.75	40.75	42.75
3x18 to 18x18	48.75	50.75	46.75	48.75	43.75	46.75
4x20 to 20x20	51.75	53.75	49.75	51.75	46.75	48.75

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Prices from Lumberman's Bureau.

	8 x 8-In. x 20 Ft. and Under				12 x 12-In., 20 Ft. and Under	
	Y.P.	Fir	Hemlock	Spruce	Y.P.	Fir
Kansas City	$41.00	*$33.00*	*$33.00*	....	$47.00	*$33.00*
Seattle	21.00	21.00	21.00	$21.00	21.00	21.00
Denver	....	30.00	....	27.50	....	32.00
San Francisco	....	24.00	24.00	....	....	24.00
St. Paul	....	38.00	31.50	....	....	43.00

Note—Boston lumber market demoralized.

	1-In. Rough, 10 In. x 16 Ft. and Under			2-In. T. and G. 10 In. x 16 Ft.	
	Y.P.	Fir	Hemlock	Y.P.	Fir
Kansas City	*$42.00*	*$42.50*	*$41.00*	*$50.00*	....
Seattle	21.00	21.00	21.00	21.00	$21.00
Los Angeles	....	30.00	30.00	....	....
Denver	....	30.00	30.00	....	30.00
San Francisco	....	24.00	24.00	....	24.00
St. Paul	....	51.00	34.00	59.00	37.50

NAILS—The following quotations are per keg from warehouse:

	Pittsburgh	St. Louis	Denver	Chicago	San Francisco	Dallas
Wire	*$2.70*	$4.00	$4.00	$4.45	$4.60	$4.50
Cut	*2.70*	5.00	5.00	4.60	6.15	....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	21.5	New Orleans	30.7
Buffalo	11.6	New York	19.5
Chicago	18.9	Pacific Coast (all rail)	75.0
Cincinnati	15.8	Philadelphia	18.5
Cleveland	10.5	St. Louis	23.6
Denver	68.6	St. Paul	32.9
Kansas City	43.6		

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. barrel	$0.045	....
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.03	$0.04
Soda ash, in 400-lb. bbl.	.05	.04
Liquid chlorine in 100-lb. cylinders	.175	16 to 18

Lime is quoted separately.

CONTRACTORS' MISCELLANEOUS SUPPLIES

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Nov. 1, 1917	One Month Ago	One Year Ago
$4.00 to $5.00	$4.50 to $5.00	$2.60 to $2.70

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York	St. Louis	Chicago	San Francisco
Galvanized	10—2½%	10—2½%	10—2½%	List
Bright	20—2½%	20—2½%	20—2½%	15%

MANILA ROPE—For rope smaller than ¾-in. the price is ¼ to ½c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ½-in., 8 ft.; ⅝-in., 6; ¾-in., 4¼; 1-in., 3⅓; 1⅛-in., 2 ft. 10 in.; 1¼-in., 2 ft. 4 in. Following is price per pound for ¾-in. and larger, in 1200-ft. coils:

Boston	$0.35½	Kansas City	$0.33½
New York	.34	Los Angeles	.33½
Chicago	.32½	Seattle	.33½
Denver	.35½	San Francisco	.31

EXPLOSIVES—Price per pound in small lots at cities named:

	Low Freezing	Gelatin			Black Powder
	20%	40%	60%	80%	
New York	......	$0.27½	$0.34½	......	$2.50*
Boston	......	......	.36¼	$0.43¾	....
Kansas City	$0.20	.26¼	.33¼	.43¼	....
Los Angeles	.20	.27	.35	......	....
Seattle	.18½	.24¾	.31¾	.41¾	....
Chicago	.19¾	.23¾	.33	.43	2.45*
St. Paul	.20	.26¼	.33½	......	2.55*
St. Louis	.16½	.20½	.29½	.39½	2.15*
Denver	.19	.25¼	.32¼	.42¼	....
Dallas	.25	.29	.39	.49	....

*25-lb. bags

POLES—Prices on Western red cedar poles:

	New York Nov. 1, 1917	New York One Year Ago	Chicago	St. Louis	Denver
6 in. by 30 ft.	$5.50	$4.77	$4.94	$4.94	$4.32
7 in. by 30 ft.	7.40	5.90	6.60	6.60	5.80
7 in. by 35 ft.	10.70	....	9.60	9.60	8.55
8 in. by 30 ft.	12.20	9.75	10.90	10.90	9.65
7 in. by 40 ft.	12.35	9.95	11.00	11.00	9.75
8 in. by 40 ft.	13.75	....	12.15	12.15	10.65
*8 in. by 45 ft.	18.20	14.45	16.20	16.20	14.30
*8 in. by 50 ft.	21.85	16.85	19.45	19.45	17.15

*10c. higher freight rates on account of double loads.

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York	
	Nov. 1, 1917	One Month Ago
Heavy melting steel scrap	*$23.50 to 24.00*	$28.50 to 29.50
No. 1 railroad wrought	*32.00 to 33.00*	39.00 to 40.00
Stove plate	*18.00 to 19.00*	20.00 to 25.00
No. 1 machinery cast	*26.00 to 27.00*	30.00 to 31.00
Machine shop turnings	*14.00 to 15.00*	18.00 to 19.00
Cast borings	*16.00 to 17.00*	20.00 to 21.00
Railroad malleable cast	*27.00 to 28.00*	32.00

	Chicago	
	Nov. 1, 1917	One Month Ago
No. 1 railroad wrought	*$28.50 to 29.00*	$36.00
Stove plate	*15.50 to 16.50*	$17.25
No. 1 machinery cast	*20.00 to 21.00*	25.00
Machine shop turnings	*15.00 to 15.50*	17.00
Cast borings	*14.25 to 15.25*	17.00
Railroad malleable cast	*24.00 to 25.00*	30.00

	St. Louis Price Delivered	
	Nov. 1, 1917	One Month Ago
No. 1 railroad wrought	*$29.00 to 30.00*	$31.50
Stove plate	*10.00 to 11.00*	16.00 to 17.00
No. 1 machinery cast	*19.00 to 20.00*	21.00 to 22.50
Machine shop turnings	*14.00 to 15.00*	12.00 to 14.00
Cast borings	*12.00 to 13.00*	13.00 to 14.00
Railroad malleable cast	*24.00 to 25.00*	25.00 to 26.00

FLAGGING—

		Nov. 1, 1917
New York	Bronx	$0.17 sq.ft.
	Manhattan	.18 sq.ft.
	Queens, 5 ft. square	.19 sq.ft.
	5x20-in. cross-walk	.30 sq.ft.
Chicago	18 in. wide	.75 lin.ft.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$2.00
New York	4	16	2.25
Chicago	4	16	**1.85**
Chicago	City specifications		1.70
St. Louis	3½	16	1.80
St. Louis	4	16	2.03
Seattle	4	16	**2.35**
Boston	4	20	...*
Kansas City	4	16	2.50
St. Paul	3½	16	2.00
San Francisco	3	16	2.15
San Francisco	3½	16	2.26
San Francisco	4	16	2.57

*Market unstable account of lumber situation.

CURBING—Prices per linear foot are as follows:

New York	5 x 16	$0.45
	5 x 20	.50
Chicago	6 x 18	.60
St. Louis	5x18 square edge	.72
San Francisco	5 x 16	.75
	5 x 20	.85

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel 1½ In. Nov. 1, 1917	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Nov. 1, 1917	Gravel ¾ In. One Yr. Ago	Sand Nov. 1, 1917	Sand One Yr. Ago
New York	**$1.40**	$1.00	**$1.50**	$1.10	$0.50	$0.50
St. Louis	**1.11**	.70	**1.11**	.70	**1.11**	.60
Chicago	1.40	1.00	1.40	1.00	1.40	.75
Dallas	1.50	....	1.50	....	1.35	....
San Francisco	1.00	1.00	1.00	1.00	1.00	1.00
Los Angeles	.85	....	.85	....	.35	....
Denver	1.40	....	1.40	....	.95	....
Seattle	**.80**	....	**.80**	....	**.80**	....
Boston	1.50	....	1.60	....	.80	....
Kansas City	**2.15**	....	**2.60**	....	.60	....
St. Paul	1.10	....	1.40	....	.50	....

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. Nov. 1, 1917	1½ In. One Year Ago	¾ In. Nov. 1, 1917	¾ In. One Year Ago
New York	***$1.15 to 1.25**	$0.90	***$1.25 to 1.35**	$1.00
Chicago	1.40	.85	1.40	.95
St. Louis	1.35	1.00	1.35	1.00
Dallas	1.41	....	1.49	....
San Francisco	1.00	1.00	1.00	1.00
Los Angeles	.95	....	1.00	....
Denver	1.40	....	1.40	....
Seattle	1.10	....	1.10	....
Kansas City	1.60	....	1.70	....
Boston	1.40	....	1.40	....
St. Paul	1.00	....	1.10	....

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$16.50	....	$2.10	....
Chicago	15.00	12.00	1.90	1.20
St. Louis	**13.00**	....	....	1.30
Dallas	20.00	15.00	....	....
San Francisco	*16.50*	....	....	1.65

Note—Refund of 10c. per bag, amounting to $2 per ton.

ROSENDALE NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., including bags:

New York	$1.15

30c. allowed for bags.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags:

	Nov. 1, 1917	One Month Ago	One Year Ago
New York	$2.22	$2.22	$1.77
Jersey City	2.16	2.16	1.60
Boston	*2.37*	2.77	1.92
Chicago	2.21	2.21	1.86
Pittsburgh	2.31	2.31	1.81
Cleveland	2.44	2.44	1.94
Detroit	2.40	2.40	1.95
Indianapolis	2.38	2.38	1.99
Toledo	2.40	2.40	1.99
Milwaukee	2.33	2.33	1.98
Minneapolis	2.48	2.48	2.13
Duluth	2.51	2.51	2.06
Peoria	2.33	2.33	1.98
Cedar Rapids	2.48	2.48	2.09
Davenport	2.40	2.40	2.04
St Louis	2.45	2.45	1.85
Denver	3.20	3.20	...
San Francisco	2.30	2.30	2.30
Dallas	2.40	2.40	...
Los Angeles	2.30	2.30	...
Kansas City	2.44	2.44	...
St. Paul	2.58	2.58	...
Seattle	2.65	2.65	...

TRIANGLE MESH REINFORCEMENT—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.89	$0.92	$0.93	$0.94	$1.06	1.27
049	0.049	1.13	1.18	1.18	1.20	1.34	1.63
068	0.068	1.42	1.47	1.49	1.50	1.68	2.04
093	0.093	1.82	1.89	1.91	1.92	2.17	2.62
126	0.126	2.31	2.39	2.42	2.44	2.74	2.96
153	0.153	2.75	2.86	2.88	2.91	3.27	3.32
180	0.180	3.16	3.27	3.31	3.34	3.76	....
245	0.245	4.17	4.33	4.36	4.41	4.96	5.65
287	0.287	4.82	5.00	5.04	5.10	5.72	6.94
336	0.336	5.59	5.80	5.85	5.92	6.66	....

PLAIN 4-IN. x 8-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
036P	0.036	.69	.71	.72	.73	.82	....
053P	0.053	.97	1.01	1.02	1.03	1.16	....
072P	0.072	1.26	1.30	1.32	1.33	1.50	....
097P	0.097	1.62	1.68	1.70	1.71	1.93	....
049R	0.049	.97	1.01	1.02	1.03	1.15	1.97
067R	0.067	1.26	1.30	1.32	1.33	1.50	....
089R	0.089	1.62	1.68	1.70	1.71	1.93	....

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized runs about 10% higher than plain.

EXPANDED METAL LATH—Prices per 100 yd. for painted are as follows:

Carload

Gage	Weight	New York Nov. 1, 1917	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$31.00	$18.00	$31.00	$34.00	$29.00	$32.00
26	250	32.05	19.00	32.00	35.00	30.25	....
25	300	33.15	20.00	33.00	....	....*	35.00
24	340	34.25	21.00	34.00	37.00	33.00	36.00
22	450	36.45	24.00	36.00	....	....*	....

*Not carried.

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING—The following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Shipment	Warehouse New York Nov. 1, 1917	Warehouse New York One Year Ago	Warehouse St. Louis	Warehouse Chicago	Warehouse San Francisco	Warehouse Dallas
¾ and larger	...*	$5.10	$3.35	$2.90†	$4.50	$6.50	$4.75
⅝	...*	5.15	3.45	2.95†	4.55	6.55	4.80
½	...*	5.20	3.50	3.00†	4.60	6.60	4.85
⅜	...*	5.35	3.75	3.15†	4.75	6.75	5.00
¼	...*	5.60	4.10	3.40†	5.00	7.00	6.00

*Mill quotations on actual specifications.

†St. Louis: Nominal Government price.

ROLLED FROM RAILS

	Dallas		Dallas
¾ in. and larger	$4.75	⅜	$5.00
⅝	4.80	¼	6.00
½	4.85		

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common Nov. 1, 1917	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$8.25	$8.25	$7.75	$32.00	$38.00
Boston	13.25	13.25	....	....	25.00
Chicago	8.00	8.00	6.00	....	....
St. Louis, salmon	8.00	8.00	7.00	....	....
St. Louis, selected	10.00	10.00	10.00	....	....
Denver	8.00	8.00	....	....	....
Los Angeles	**7.50**	6.50	....	....	28.00
San Francisco	10.00	10.00	10.00	....	....
Dallas	8.60	8.60	....	22.00	22.50
Kansas City	11.00	11.00	....	....	23.00
St. Paul	8.70	8.70	....	....	....
Seattle	9.00	9.00	....	....	28.75

HOLLOW TILE—Hollow building tile price per block in cents:

	New York Nov. 1, 1917	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4x12x12	$0.0925	$0.075	**$0.079**	$0.054	$0.0825	$0.075
6x12x12	.1295	.104	**.120**	.066	.11	.10
8x12x12	.15725	.1266	**.135**	.09	.1275	.14
10x12x12	.185	.149	**.1607**	.15	.20	.16
12x12x12	.23125	.1875	**.19285**	.18	.22	.21

	4x12x12	8x12x12	12x12x12
Boston	$0.0957	$0.171	$0.2266
Kansas City	.058	.112	.1575
Denver	**.11**	**.20**	**.30**
Los Angeles	.055	.10	.165
Seattle	.06	.10	.16
St. Paul	.055	.138	.153

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Pittsburgh	New York Nov. 1, 1917	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in.	$3.00	$5.25	$3.85	$5.05	$5.00	$7.75	$6.00
Channels, 3 to 15 in.	3.00	5.25	3.25	5.05	5.00	7.75	6.00
Angles, 3 to 6 in., ¼ in. thick	3.00	5.25	3.25	5.05	5.00	7.75	6.00
Tees, 3 in. and larger	3.00	5.30	3.40	5.05	5.05	7.75	6.00
Plates	3.25	10.00	4.00	7.05	*7.00*	10.50	9.00

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill, Pittsburgh	Warehouse New York Nov. 1, 1917	Warehouse New York One Year Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse San Francisco	Warehouse Dallas
¾ in. and larger	$5.25	$7.00	$5.25	$5.50	$5.55	$7.15	$8.40

CONE HEAD BOILER

	Mill, Pittsburgh	Warehouse New York Nov. 1, 1917	Warehouse New York One Year Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse San Francisco	Warehouse Dallas
¾ in. and larger	5.35	7.10	5.35	5.60	5.65	7.25	8.50
⅝ and $\frac{11}{16}$	5.50	7.25	5.50	5.75	5.80	7.40	8.65
½ and $\frac{9}{16}$	5.85	7.60	5.85	6.10	6.15	7.75	9.00

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.cl.	2-Ply c.l.	2-Ply l.cl.	3-Ply c.l.	3-Ply l.cl.
No. 1 grade	$1.15	$1.40	$1.45	$1.60	$1.75	$1.90
No. 2 grade	1.10	1.25	1.25	1.40	1.50	1.65

Asbestos asphalt-saturated felt (14 lb. per square) costs $6.50 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $1.85 per roll in carload lots and $2.10 for smaller quantities.

Shingles, red and green slate finish, cost $4.75 per square in carloads, $5 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York or Chicago:

	Carload Lots	Less Than Carload Lots
Tar felt (14 lb. per square of 100 sq.ft.)	$61.00	$62.00
Tar pitch (in 400-lb. bbl.)	15.00	16.50
Asphalt pitch (in barrels)	29.00	30.50
Asphalt felt	60.00	62.00

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

	Large Lots, Pittsburgh	St. Louis	Chicago	*San Francisco	New York Nov. 1, 1917	New York One Yr. Ago
Blue Annealed						
No. 10	*6.00*	*8.05*	*8.00*	11.00	10.00	4.25
No. 12	*6.05*	*8.10*	*8.05*	11.05	10.05	4.30
No. 14	*6.10*	*8.15*	*8.10*	11.10	10.10	4.35
Black						
Nos. 18 and 20	*5.80*	*9.35*	*8.30*	*10.30*	*9.30*	3.80
Nos. 22 and 24	*5.85*	*9.40*	*8.35*	*10.85*	*9.35*	3.85
No. 26	*5.90*	*9.45*	*8.40*	*10.90*	*9.40*	3.90
No. 27	*5.95*	*9.50*	*8.45*	*10.95*	*9.45*	3.95
No. 28	*6.00*	*9.55*	*8.50*	*11.00*	*9.50*	4.00
Galvanized						
No. 10	*6.50*	*8.35*	*8.70*	....	10.80	....
No. 12	*6.60*	*8.50*	*8.70*	*11.40*	10.90	4.50
No. 14	*6.60*	*8.65*	*8.70*	*11.40*	10.90	4.50
Nos. 18 and 20	*6.90*	*8.95*	*9.00*	*11.70*	11.25	4.90
Nos. 22 and 24	*7.05*	*9.10*	*9.15*	*11.85*	*10.55*	5.30
No. 26	*7.20*	*9.25*	*9.20*	*12.00*	*10.70*	5.45
No. 28	*7.50*	*9.55*	*9.50*	*12.30*	*11.00*	5.75

LINSEED OIL—These prices are per gallon:

	New York Nov. 1, 1917	New York One Year Ago	Cleveland Nov. 1, 1917	Cleveland One Year Ago	Chicago Nov. 1, 1917	Chicago One Year Ago
Raw in barrels	*$1.16*	$0.88	*$1.15*	$0.97	*$1.17*	$0.92
5-gal. cans	*1.26*	.98	*1.25*	1.07	*1.27*	1.02

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red Nov. 1, 1917 Dry	Red Nov. 1, 1917 In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White Nov. 1, 1917 Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	12.25	12.50	10.50	11.00	12.00	10.50
25- and 50-lb. kegs	12.50	12.75	10.75	11.25	12.25	10.75
12½-lb. keg	12.75	13.00	11.00	11.50	12.50	11.00
1- to 5-lb. cans	14.25	14.50	12.50	12.50	14.50	12.50

LUMBER*—Price per M in carload lots:

Rough Douglas Fir, No. 1 Common—More than carload lots in San Francisco:

Size in Inches	15 Ft. and Under	16 to 24 Ft.	25 to 32 Ft.
3 and 4x4	$24.00	$25.50	....
3 and 4x6 and 8	24.00	24.50	$25.50
6x6 and 8x8	24.50	25.50	25.50
3 and 4x10	24.00	25.50	26.50
6 and 8x10	25.00	26.00	27.00
3 and 4x12	24.00	25.50	26.50
6 and 8x12	25.50	26.50	26.50
10 and 12x12	25.00	25.00	27.00
3 and 4x14	25.00	27.00	28.00
6 and 8x14	26.50	27.50	27.50
7 and 9x14	27.50	28.50	28.50
10 and 12x14	26.00	26.00	28.00

Square Edge and Sound Green

	Southern Pine New York 20 Ft. and Under	Southern Pine New York 22-24 Ft.	Southern Pine Chicago 20 Ft. and Under	Southern Pine Chicago 22-24 Ft.	Yellow Pine St. Louis 20 Ft. and Under	Yellow Pine St. Louis 22-24 Ft.
3x 4 to 8x 8	**$33.75**	**$35.75**	**$31.75**	**$33.75**	**$28.75**	**$30.75**
3x10 to 10x10	**34.75**	**38.75**	**32.75**	**34.75**	**29.75**	**31.75**
3x12 to 12x12	**40.75**	**42.75**	**38.75**	**40.75**	**35.75**	**37.75**
3x14 to 14x14	**42.75**	**44.75**	**40.75**	**42.75**	**37.75**	**39.75**
3x16 to 16x16	**45.75**	**47.75**	**43.75**	**45.75**	**40.75**	**42.75**
3x18 to 18x18	**48.75**	**50.75**	**46.75**	**48.75**	**43.75**	**46.75**
4x20 to 20x20	**51.75**	**53.75**	**49.75**	**51.75**	**46.75**	**48.75**

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Prices from Lumberman's Bureau.

	8 x 8-In. x 20 Ft. and Under Y.P.	Fir	Hemlock	Spruce	12 x 12-In., 20 Ft. and Under Y.P.	Fir
Kansas City	**$41.00**	*$33.00*	*$33.00*	....	**$47.00**	*$33.00*
Seattle	21.00	21.00	21.00	$21.00	21.00	21.00
Denver	....	30.00	....	27.50	....	32.00
San Francisco	....	24.00	24.00	....	....	24.00
St. Paul	....	38.00	31.50	....	....	43.00

Note—Boston lumber market demoralized.

	1-In. Rough, 10 In. x 16 Ft. and Under Y.P.	Fir	Hemlock	2-In. T. and G. 10 In. x 16 Ft. Y.P.	Fir
Kansas City	*$42.00*	*$42.50*	*$41.00*	*$50.00*	....
Seattle	21.00	21.00	21.00	21.00	$21.00
Los Angeles	....	30.00	30.00	....	....
Denver	....	30.00	30.00	....	30.00
San Francisco	....	24.00	24.00	....	24.00
St. Paul	....	51.00	34.00	59.00	37.50

NAILS—The following quotations are per keg from warehouse:

	Pittsburgh	St. Louis	Denver	Chicago	San Francisco	Dallas
Wire	*$2.70*	$4.00	$4.00	$4.45	$4.60	$4.50
Cut	*2.70*	5.00	5.00	4.60	6.15	....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	21.5	New Orleans	30.7
Buffalo	11.6	New York	19.5
Chicago	18.9	Pacific Coast (all rail)	75.0
Cincinnati	15.8	Philadelphia	18.5
Cleveland	10.5	St. Louis	23.6
Denver	68.6	St. Paul	32.9
Kansas City	43.6		

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. barrel	$0.045	....
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.63	$0.04
Soda ash, in 400-lb. bbl.	.05	.04
Liquid chlorine in 100-lb. cylinders	.175	.16 to .18

Lime is quoted separately.

CONTRACTORS' MISCELLANEOUS SUPPLIES

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Nov. 1, 1917	One Month Ago	One Year Ago
$4.00 to $5.00	$4.50 to $5.00	$2.60 to $2.70

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York	St. Louis	Chicago	San Francisco
Galvanized	10—2½%	10—2½%	10—2½%	**List**
Bright	20—2½%	20—2½%	20—2½%	15%

MANILA ROPE—For rope smaller than ⅝-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅝-in., 8 ft.; ¾-in., 6; ⅞-in., 4½; 1-in., 3½; 1⅛-in., 2 ft. 10 in.; 1¼-in., 2 ft. 4 in. Following is price per pound for ⅝-in. and larger, in 1200-ft. coils:

Boston	$0.35½	Kansas City	$0.33½
New York	.34	Los Angeles	.33½
Chicago	.32½	Seattle	.33½
Denver	.35½	San Francisco	.31

EXPLOSIVES—Price per pound in small lots at cities named:

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	Gelatin 80%	Black Powder
New York	......	$0.27½	$0.34½	......	$2.50*
Boston	......	......	.36¼	$0.43¾	....
Kansas City	$0.20	.26¼	.33¼	.43¼	....
Los Angeles	.20	.27	.35	......	....
Seattle	.18½	.24¾	.31¾	.41¾	....
Chicago	.19¾	.23¾	.33	.43	2.45*
St. Paul	.20	.26¼	.33¼	......	2.55*
St. Louis	.16½	.20½	.29½	.39½	2.15*
Denver	.19	.25¼	.32¼	.42¼	....
Dallas	.25	.29	.39	.49	....

*25-lb. bags

POLES—Prices on Western red cedar poles:

	New York Nov. 1, 1917	New York One Year Ago	Chicago	St. Louis	Denver
6 in. by 30 ft.	$5.59	$4.77	$4.94	$4.94	$4.32
7 in. by 30 ft.	7.40	5.90	6.60	6.60	5.80
7 in. by 35 ft.	10.70	....	9.60	9.60	8.55
8 in. by 30 ft.	12.20	9.75	10.90	10.90	9.65
7 in. by 40 ft.	12.35	9.95	11.00	11.00	9.75
8 in. by 40 ft.	13.75	....	12.15	12.15	10.65
*8 in. by 45 ft.	18.20	14.45	16.20	16.20	14.30
*8 in. by 50 ft.	21.85	16.85	19.45	19.45	17.15

*10c. higher freight rates on account of double loads.

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York Nov. 1, 1917	New York One Month Ago
Heavy melting steel scrap	*$23.50* to *24.00*	$28.50 to 29.50
No. 1 railroad wrought	*32.00* to *33.00*	39.00 to 40.00
Stove plate	*18.00* to *19.00*	20.00 to 25.00
No. 1 machinery cast	*26.00* to *27.00*	30.00 to 31.00
Machine shop turnings	*14.00* to *15.00*	18.00 to 19.00
Cast borings	*16.00* to *17.00*	20.00 to 21.00
Railroad malleable cast	*27.00* to *28.00*	32.00

	Chicago Nov. 1, 1917	Chicago One Month Ago
No. 1 railroad wrought	*$28.50* to *29.00*	$36.00
Stove plate	*15.50* to *16.50*	17.25
No. 1 machinery cast	*20.00* to *21.00*	25.00
Machine shop turnings	*15.00* to *15.50*	17.00
Cast borings	*14.25* to *15.25*	17.00
Railroad malleable cast	*24.00* to *25.00*	30.00

	St. Louis Price Delivered Nov. 1, 1917	St. Louis Price Delivered One Month Ago
No. 1 railroad wrought	*$29.00* to *30.00*	$31.50
Stove plate	*10.00* to *11.00*	16.00 to 17.00
No. 1 machinery cast	*19.00* to *20.00*	21.00 to 22.50
Machine shop turnings	*14.00* to *15.00*	12.00 to 14.00
Cast borings	*12.00* to *13.00*	13.00 to 14.00
Railroad malleable cast	*24.00* to *25.00*	25.00 to 26.00

Proposals

For Proposals Advertised See Pages 82 to 84 Inclusive

WATER-WORKS

Bids Close		See Er.g. News-Record
Nov. 5.	Moberly, Mo.	Nov. 1
Nov. 7.	Tonawanda, N. Y.	Oct. 18
Nov. 8.	Pender, Neb.	Nov. 1
Nov. 10.	Winnipeg, Man. Adv. Nov. 1.	Nov. 1
Nov. 15.	Chapleau, Ont.	Nov. 1

SEWERS

Bids Close		See Eng. News-Record
Nov. 3.	Altamont, N. Y. Adv. Oct. 25.	Oct. 25
Nov. 5.	Cheyenne, Wyo.	Oct. 25
Nov. 5.	St. Paul, Minn.	Nov. 1
Nov. 6.	Eagle Lake, Tex.	Nov. 1
Nov. 6.	Kansas City, Mo.	Nov. 1
Nov. 7.	Canton, O.	Nov. 1
Nov. 8.	Jersey City, N. J.	Nov. 1
Nov. 9.	Brooklyn, N. Y.	Nov. 1
Nov. 12.	Pleasantville, N. J. Adv. Nov. 1.	Nov. 1
Nov. 14.	Niles, O.	Nov. 1
Nov. 19.	Brainerd, Minn.	Nov. 1
Nov. 26.	Oil City, Pa.	Nov. 1

BRIDGES

Bids Close		See Eng. News-Record
Nov. 5.	Utica, Ill.	Nov. 1
Nov. 6.	Watonga, Okla.	Nov. 1
Nov. 6.	Oswego, Kan. Adv. Oct. 18 and 25.	Oct. 18
Nov. 6.	Dallas, Tex. Adv. Oct. 11 and 18.	Oct. 11
Nov. 6.	Little Falls, Minn.	Oct. 18
Nov. 8.	Stillwater, Okla.	Nov. 1
Nov. 12.	Minneapolis, Minn.	Oct. 25
Nov. 17.	Charleston, S. C.	Nov. 1

STREETS AND ROADS

Bids Close		See Eng. News-Record
Nov. 2.	Brooklyn, N. Y.	Nov. 1
Nov. 5.	California	Oct. 25
Nov. 5.	Bloomfield, N. J.	Oct. 25
Nov. 5.	Pikeville, Ky.	Sept. 27
Nov. 5.	Kansas City, Kan.	Oct. 18
Nov. 5.	Coffeeville, Miss. Adv. Oct. 18 to Nov. 1.	Oct. 18
Nov. 5.	Fayetteville, W. Va.	Oct. 18
Nov. 5.	Des Moines, Ia.	Nov. 1
Nov. 5.	Oakland, Cal.	Nov. 1
Nov. 5.	Butte, Mont.	Nov. 1
Nov. 6.	Oregon	Nov. 1
Nov. 6.	Ft. Pierce, Fla.	Oct. 25
Nov. 6.	Goldendale, Wash.	Oct. 25
Nov. 6.	West Orange, N. J.	Oct. 18
Nov. 6.	Indiana	Oct. 11
Nov. 6.	Morgantown, W. Va. Adv. Oct. 11.	Oct. 11
Nov. 6.	Tallahassee, Fla.	Oct. 25
Nov. 6.	San Diego, Cal.	Oct. 25
Nov. 6.	Waterville, Wash.	Oct. 25
Nov. 7.	Santa Ana, Cal.	Nov. 1
Nov. 7.	Globe, Ariz.	Nov. 1
Nov. 7.	Montgomery, O.	Nov. 1
Nov. 7.	Jefferson City, Mo.	Oct. 25
Nov. 8.	Pennsylvania Adv. Oct. 18 to Nov. 1.	Oct. 18
Nov. 8.	Norristown, Pa. Adv. Oct. 25 and Nov. 1.	Oct. 25
Nov. 8.	Jersey City, N. J.	Nov. 1
Nov. 9.	Cincinnati, O.	Nov. 1
Nov. 9.	Brooklyn, N. Y.	Nov. 1
Nov. 10.	Gibson, Ga.	Nov. 1
Nov. 12.	California	Nov. 1
Nov. 13.	Prestonsburg, Ky.	Oct. 25
Nov. 14.	Minnesota	Oct. 25
Nov. 15.	Clarksville, Tenn.	Nov. 1
Nov. 16.	Cincinnati, O.	Nov. 1
Nov. 19.	Seattle, Wash.	Nov. 1
Nov. 19.	Brewton, Ala.	Nov. 1
Nov. 20.	Holdredge, Neb.	Nov. 1
Nov. 22.	Hindman, Ky.	Oct. 25
Nov. 23.	Kendallville, Ind.	Oct. 25

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Nov. 2.	Armour, S. D.	Nov. 1
Nov. 7.	Lincoln, Neb.	Oct. 25
Nov. 7.	Mason City, Ia.	Nov. 1
Nov. 8.	Harrisonville, Mo.	Oct. 25
Nov. 8.	Ft. Dodge, Ia.	Nov. 1
Nov. 9.	St. Cloud, Minn.	Sept. 27
Nov. 12.	Havana, Ill.	Nov. 1
Nov. 13.	Granite Falls, Minn.	Nov. 1
Nov. 15.	Garden Prairie, Ill.	Nov. 1
Nov. 16.	Madison, Wis.	Nov. 1

BUILDINGS

Bids Close		See Eng. News-Record
Nov. 7.	Bellefontaine, O.	Nov. 1
Nov. 12.	Eldorado, Tex.	Nov. 1
Nov. 12.	Cleveland, O.	Nov. 1
Nov. 12.	Tallahassee, Fla.	Nov. 1
Nov. 13.	Palo Alta, Cal.	Nov. 1
Nov. 15.	Northampton, Mass.	Oct. 25
Nov. 25.	Middletown, Mass.	Oct. 4
Dec. 1.	Norfolk, Va.	S 13

MISCELLANEOUS

Bids Close		See Eng. News-Record
Nov. 5.	Incinerator — Okmulgee, Okla.	Nov. 1
Nov. 7.	Duct Line, New York, N. Y.	Oct. 25
Nov. 13.	Channel Improvements — Columbus, O. Adv. Oct. 25.	Oct. 25
Nov. 15.	Pumping Machinery — Brockton, Mass. Adv. Oct. 25 and Nov. 1.	Oct. 25
Nov. 15.	Flood Control—Dayton, O. Adv. Sept. 13 to Oct. 18.	Sept. 13

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Nov. 5.	Post Office — Burlington, N. C.	Oct. 4
Nov. 5.	Tank and Tower—Philadelphia, Pa.	Oct. 25
Nov. 5.	Steel Tower — Charleston, S. C.	Oct. 25
Nov. 5.	Steel Tower—Norfolk, Va.	Oct. 25
Nov. 5.	Extension General Storehouse—Newport, R. I.	Nov. 1
Nov. 5.	Machine Shop — Washington, D. C.	Nov. 1
Nov. 5.	Distributing System — Charleston, W. Va.	Nov. 1
Nov. 6.	Bridge—Towaoc, Colo.	Oct. 18
Nov. 7.	Buildings — Elbowoods, N. D.	Oct. 18
Nov. 8.	Levee Work — Vicksburg, Miss. Adv. Oct. 18 to Nov. 1.	Oct. 18
Nov. 8.	Piers, etc.—Detroit, Mich. Adv. Oct. 11 to Nov. 1.	Oct. 11
Nov. 9.	Post Office—Forsyth, Ga.	Oct. 11
Nov. 12.	Emergency Hospital—Brooklyn, N. Y.	Nov. 1
Nov. 13.	Piles, Walling and Lumber—New Orleans, La. Adv. Nov. 1.	Nov. 1
Nov. 13.	Post Office—Harrisonville, Mo.	Oct. 11
Nov. 14.	Post Office—Austin, Tex.	Oct. 11
Nov. 15.	Canals—El Paso, Tex. Adv. Oct. 18.	Oct. 18
Nov. 16.	Maneuver Boats — Wheeling, W. Va. Adv. Oct. 18.	Oct. 18
Nov. 19.	Fitting out Cranes—Washington, D. C.	Oct. 18
Nov. 19.	Shipbuilding Ways — Brooklyn, N. Y.	Oct. 25
Nov. 19.	Electric Elevator—Norfolk, Va.	Nov. 1
Nov. 19.	Refrigerating Plant and Brine Circulating System—Washington, D. C.	Nov. 1
Nov. 19.	Timber Bulkheads, Boston, Mass.	Nov. 1
Nov. 20.	Bridge—Washington, D. C.	Nov. 1
Nov. 20.	Post Office—Caribou, Me.	Oct. 18
Nov. 22.	Post Office—Basin, Wyo.	Oct. 25
Nov. 23.	Post Office — Woodbury, N. J.	Oct. 25
Nov. 26.	Dry Dock Crane, Wash., D. C.	Oct. 25
Nov. 26.	Steel Towers—Washington, D. C.	Nov. 1
Nov. 27.	Post Office—Chapel Hill, N. C.	Oct. 25
Nov. 27.	Stone—New Orleans, La. Adv. Nov. 1.	Nov. 1
Nov. 28.	Post Office — Bellefourche, S. D.	Oct. 11
Nov. 30.	Post Office—Buffalo, Wyo. Adv. Nov. 1.	Nov. 1
Nov. 30.	Machinery, etc. — Cincinnati, O.	Nov. 1
Dec. 5.	Post Office—Decatur, Ala.	Nov. 1
Dec. 18.	Laterals — Torr ngton, Wyo.	Nov. 1

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

Mass., Agawam — Town sold $25,000 bonds to build water-works system. E. A. Kellog, chn. comrs.

N. Y., Olean—(Official)—City having peliminary plans prepared building filtration plant; including 6 motor driven centrifugal pumps, concrete mixing, chambers, coagulating basins, filters, clearwell and brick operating building. E H. Atwood, c/o Vacuum Oil Co., Olean, engr. Noted Oct. 18.

N. Y., Rochester—City plans election soon to vote on $75,000 bond issue to improve water-works system. E. T. Elwood, city engr.

N. C., Benson—City having plans prepared by G. C. White, engr., Durham, to build water-works and sewerage systems.

Miss., Pascagoula—International Shipbuilding Co. plans to build water-works system for shipyards and residential district.

O., Plymouth—Village election in November to vote on $18,000 bond issue to build filtration plant. E. L. Buckart, supt.

O., West Park — Town to sell $35,000 bonds Nov. 26, to extend and improve water-works system. F. Fouchter, clk.

Ind., Bristol—Town plans to build water-works system.

Mich., Jackson — (Official)—City had plans prepared by S. G. Pollard, engr., 3422 Burch Ave., Cincinnati, O., for water-works improvements, including artesian wells, electrically operated pumping station and 6200 ft. 20-24-in. wood or cement pipe. About $70,000. Noted Oct. 4.

Ia., Red Oak—See "Sewers."

Kan., Eldorado—City plans to install filtration plant. About $20,000. W. H. Betz, supt.

Tex., Beaumont—City election Nov. 17 to vote on $300,000 bond issue to build water-works system. C. L. Scherer, city engr.

Okla., Indiahoma — City voted $15,000 bonds to build water-works system. A. Finigan, pres. Noted Sept. 13.

Okla., Madill — City plans election to vote on bond issue to improve water-works system.

Wash., Othello—City election Nov. 19 to vote on $14,000 bond issue to improve water-works system. Noted Apr. 12.

Water-Works (Continued)

Wash., Seattle—City having plans prepared extending Cedar River water-works system. About $3,700,000. A. H. Dimock, city engr.

Ore., Monmouth—A. J. Pepin, Chitwood, plans to build water-works system for Monmouth and Independence, including 12-in. pipe line from Teals Creek, 15 mi. long. About $100,000. F. Moreland, supt.

Cal., Redding—City having plans prepared for water-works system.

Que., Three Rivers—City soon lets contract for pumping station and concrete reservoir. A Beliveau, clk. Asselin & Denoncourt, Three Rivers, archts. Noted May 3.

Ont., Stratford—City plans to build new storage basin at water-works. About $15,000. A. B. Manson, city engr.

BIDS DESIRED

Neb., Pender—Until Nov. 8, by City, building water-works and electric light systems. Hennington Eng. Co., Omaha, engrs. Noted Oct. 4.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Kan., Winfield—City let contract for water-works improvements, involving 20,000 ft. 14-18-in. c.i. pipe, to Amer. Cast Iron Pipe Co., 716 Scarritt Bldg., Kansas City, Mo.,, $59,856. Noted Nov. 1.

★N. D., Dickinson—See "Sewers."

★Ark., Dardanelle—(Official)—Comrs. Sewer Dist. No. 1 let contract installing 36,000 ft. 6 21-in. water mains, to McEachin & McEachin, McAlester, Okla., $36,000. Noted Aug. 23.

Wash., Seattle—Bd. Pub. Wks. received low bids for water mains in 10th Ave., N. E. (a) wood pipe, (b) iron pipe, from Scalzo & Co., 1708 22nd Ave., (a) $30,598; (b) $47,327; Fiorito Bros., Seattle, (a) $31,095, (b) $48,798; V. Ramaglia, 4830 37th St., (a) $31,298, (b) $48,798.

SEWERS

Proposed Work

N. J., Passaic—City plans to build sewer in Monroe St. About $27,500. C. R. Wise, city engr.

N. J., Prospect Park—(Paterson P. O.)—Council passed ordinance to build sewerage system and pumping plant. H. J. Harden, boro. engr.

O., Akron—City plans to build main trunk sewer, outlet and branches in Dist. No. 3. E. A. Zeisloft, city engr.

O., Painesville—City plans to build sewer in Sanford St. About $29,000. J. Crabbs, city engr.

O., West Park — City to sell $30,000 bonds Nov. 26 to build sewers. F. Feuchter, clk.

Ind., Indianapolis—City had plans prepared by G. W. Fuller, engr., 170 Bway., New York City, building sewage disposal plant. Cost estimated at $3,090,050. Noted Apr. 17.

Ind., Indianapolis — (Official) — City lets contract about Nov. 15 building sewer in East 30th St., 7325 ft. long, brick or segmental block. About $90,000. C. A. Brown, asst. city engr.

Mich., St. Joseph—(Official)—City rejected bids for sewage disposal plant. Temporary system will be installed for present. Noted Oct. 4.

Ill., Maywood—Sanitary Dist., Chicago, purchased site in Provo Twp. on Des Plaines River, near here, on which it plans to build sewage treatment plant. Cost between $75,000 and $100,000. J. McGillen, Karpen Bldg., Chicago, clk.

Ill., Rock Island—City cancelled contract awarded last year to Independent Constr. Co., 304 Lane Bldg., Davenport, Ia., building southwest storm drain. New bids soon. About $60,000. W. Treichler, city engr.

Ia., Marcus—Town having plans prepared for sanitary sewerage system, including septic tank and disposal plant. About $42,000.

Ia., Red Oak—McGregor Subdivision Co., Cedar Rapids State Bank Bldg., Cedar Rapids, plans to lay out 46-acre sub-division, including sewers, gas mains, water-works, and sidewalks. H. R. Greene, 2nd St. and 1st Ave., Cedar Rapids, engr.

Neb., Omaha—City plans to build storm sewers on 25th and Dahlman Blvd.; also sewer and storm-water drain near Carter Lake. About $28,000 and $31,000 respectively. J. A. Bruce, city engr.

Tex., Frost—City sold $10,500 bonds to build sewers. J. S. Persnall, secy.

Tex., Yoakum—San Antonio & Arkansas Pass Ry. plans sanitary sewerage system throughout shop buildings and grounds. About $10,000. J. S. Peter, San Antonio, genl. mgr.

Colo., Arvada—City election soon to vote on bond issue to build sewerage system. J. Lercher, supt.

Idaho, Burley—Council passed ordinance creating Impvt. Dist. No. 18, and will build storm sewers and pavements. About $54,000. E. C. Davis, clk.

Idaho, Montpelier—Council passed ordinance providing for construction of new sewerage system. T. Barrett, clk.

Utah, Moab—Town plans to install sewerage system for business section. About $12,000.

Utah, Ogden—City plans to install sewerage system. About $26,000. J. M. Tracy, city engr.

Cal., Los Angeles—City plans to build sewers in Junipero Ave. and 11th St.; also in 20 other streets. H. G. Waughop, clk.

Ont., London—City having plans prepared for sanitary sewers on Eva, Florence, York and Eleanor Sts. About $18,000. H. Brazier, city engr.

BIDS DESIRED

N. Y., Brooklyn—(Official) — Until Nov. 9, by L. H. Pounds, boro. pres., building sewer in portion 39th St., involving 1052 lin.ft. 30-in. brick sewer and 125 lin.ft. 18-in. pipe sewer. About $12,573.

N. J., Jersey City—(Official)—Until Nov. 8, by City, for 18-in. vitr. pipe sewer in portion Summit Ave. C. A. Van Kuren, city engr. Noted Sept. 13.

N. J., Pleasantville — (Official) — Until Nov. 12, by City, building sanitary sewerage system and sewage treatment plant. N. Andrews, clk. Noted Sept. 27. Advertised in this issue.

Pa., Oil City—(Official)—Until Nov. 26, by R. Mackenzie, controller, building storm sewers in portions Alcorn and Siverly Aves. and Wayne St.; also sanitary sewers in portions Alcorn, Siverly, Keith, Pierce, and Kramer Aves., Wayne and Martin Sts., involving 13,000 ft., 6-18 in. terra cotta pipe, 390 ft. 18-24 ft. rein.-con. pipe. About $21,000. B. B. Weber, city engr. Noted Oct. 25 under Franklin, Pa.

O., Canton—(Official)—Until Nov. 7, by Dir. Pub. Serv., building storm water sewers in portions various streets. W. E. Sarver, city engr. Noted Sept. 13.

O., Niles—(Official)—Until Nov. 14, by B. L. Hogan, dir. pub. serv., building sanitary sewer in Hartzell Ave. W. J. Breeze, city engr.

Minn., Brainerd—Until Nov. 19, by A. Mahlum, city clk., building lateral sewers in Dist. No. 3, including about 4129 ft. 8-10 in. tile. C. D. Peacock, city engr.

Minn., St. Paul—(Official)—Until Nov. 5, by H. W. Austin, purch. agt., building Otto-Niles sewerage system. O. Claussen, city engr.

Mo., Kansas City—Until Nov. 6, by Bd. Pub. Wks., building sewers, curbing and sidewalks in Dist. No. 5. C. Hill, city engr.

Tex., Eagle Lake—Until Nov. 6, by City for sanitary sewerage system, including 11,500 ft. 6- 8-in. pipe. Norris Eng. Co., Wharton, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates contracts awarded)

N. Y., Brooklyn — (Official) — L. H. Pounds, boro. pres., received low bids Oct. 17, building sewers and sewage pumping station in Flatlands Ave. from Ralph Ave. to Paerdegat Ave., N., thence southerly across marginal area between Flatlands Ave. and Paerdegat Basin, from J. F. Cogan Co., Woolworth Bldg., New York City, $421,673; Cranford Co., 52 9th St., $577,275; Newman & Carey Subway Constr. Co., 1228 Nostrand Ave., $646,893. Noted Oct. [illegible]

N. Y., New York—Boro. received lowest bid, Oct. 23rd, improving sewers in portions of East 114th and 121st Sts. and West 163rd St., from Melrose Contg. Co., 147 East 125th St., about $12,894.

Pa., Phila.—See "Streets and Roads"

W. Va., Wellsburg—City received low bids building lateral sewers in 3rd and 4th Wards, from Ward Heating Supply Co., 521 Main St., $29,213, and B. Cresap, $24,021. Noted Oct. 11.

★Ky., Falmouth—City let contract for sanitary sewerage system, to W. L. Nowland & Co., Covington. About $10,000.

★O., Cuyahoga Falls—City let contract for Hotel Ave. sanitary sewerage system, involving 7500 cu.yd. earth excav., 300 cu.yd. rock trench excav., 2 mi. 6-12-in. sewer pipe, 22 manholes, etc., to C. L. Wright, Mt. Vernon, $16,846. Noted Oct. 18.

★Mich., Detroit—City let contract installing sewers in block bounded by Center Line, Van Dyke, Kebbe and Kerkle Sts.; also sewer in Lawrence St., and in block bounded by 12th, Hamilton, Lawrence and Burlington Sts., to M. Q. Kurjian, 188 Jefferson Ave., $16,296 and $13,811, respectively.

Minn., St. Paul—City received low bids, Oct. 22, for storm water sewer in portions Fairview Ave., Lawrence St., and Macalster Ave., from Thornton Bros., Scandinavian Bank Bldg., $77,687; O'Neill & Preston, 60 East 6th St., $87,400; E. T. Webster, 437 Beacon St., $91,287. Noted Oct. 18.

★Kan., Baxter Springs—City let contract for sewerage system, involving 82,618 ft. 8-15-in. sewer pipe, 302 8- 16-in. c.-i. pipe, together with manholes, etc., to Plummer-Adams Co., Springfield, Mo., $151,237. Noted Oct. 11.

Neb., Omaha- City received lowest bid building sewer in Dist. No. 355, involving 1196 ft. 3-7 in. pipe, from Omaha Contg. Co., 3805 Manderson St., $22,433.

★N. D., Dickinson—City let contract extending sewerage and water-works systems, to C. W. Schruit, Minneapolis, Minn. About $30,000. Noted July 12.

★Mont., Hardin—City let contract building lateral drainage sewerage system and paving 28 blocks to Hanlan & Oakes, 338 Lumber Ex. Bldg., Minneapolis, Minn. About $125,000.

★Mont., Saco—City let contract for sewerage system, to G. W. Kemper, Minot, N. D. About $38,000.

★Idaho, Pocatello—(Official)—City let contract 10,000 ft. 9-in. sewers in Dist. No. 12, to R. M. Bardsen & Co., Pocatello, $24,527. Noted Oct. 11.

Cal., Santa Barbara—City received lowest bid building intercepting sewerage system, from Malgenovich & Gillespie, 219 Bloom St., Los Angeles, $36,325; sewage disposal plant and outfall sewer from W. Ledbetter, Pacific Electric Bldg., Los Angeles, $33,431 and $37,942 respectively. Noted Oct. 4.

★Cal., Upland—City let contract building outfall sewer, using cement pipe, to J. Chutuk, 532 South Matthews St., Los Angeles, $18,119. Noted Oct. 18.

BRIDGES

Proposed Work

N. J., Red Bank—Bd. Freeholders Monmouth Co., Freehold, had plans prepared for rein.-con. bridge, 360 ft. long, 30 ft. wide over Shrewsbury River, to be known as Hubbards Bridge. About $40,000. G. D. Cooper, 60 Broad St., Red Bank, co. engr.

Mich., Monroe — Monroe Co. and State Highway Comn., Lansing, plans to build bridge over River Raisin at county farm. About $30,000.

Tex., San Antonio—Comrs. Washington and Waller Cos. plan to build bridge over Brazos River. About $60,000.

Okla., Sallisaw—See "Streets and Roads."

Wash., Olympia — Olympia Co. rejected bids building rein.-con. bridge over Des Chutes waterway, also paving 10 blocks Harrison St. About $129,000. Noted Sept. 20.

BIDS DESIRED

S. C., Charleston—(Official)—Until Nov. 17, by Sanitary and Drainage Comn. Charleston Co., building steel draw bridge and timber approach over Dawhoo River. J. W. Marvin, engr.; advertised in this issue.

Bridges (Continued)

Ill., Utica—(Official)—Until Nov. 5, by Comrs. La Salle Co., Ottawa, building new steel superstructure on 2 north spans of Utica bridge over Illinois River. G. L. Farnsworth, Ottawa, co. supt. highways.

Okla., Stillwater—Until Nov. 8, by Payne Co., building 428 ft. bridge over Cimarron River. H. E. Overholt, ch. bd.

Okla., Watonga—Until Nov. 6, by Blaine Co., building several bridges.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Rome—W. W. Wotherspoon, supt. pub. wks., Capitol, Albany, let contract building new plate girder bridge over Black River Canal, on Whitesboro St., to W. S. Rae, 439 Oliver Bldg., Pittsburgh, $11,683.

★Pa., Butler—(Official) — Pennsylvania Pub. Ser. Comn., Harrisburg, let contract building steel bridge on Main St. to W. S. Rae, 439 Oliver Bldg., Pittsburgh, $184,[illegible] Noted Oct. 4.

★Pa., Phila.—Dept. Pub. Wks. let contract improving Penrose Ferry bridge to E. C. Fish, $15,000.

★Ala., Carrolton—See "Streets and Roads."

★Ia., Ft. Dodge—(Official)—City let contract building rein.-con. viaduct on North 3rd St., to Jensen Constr. Co., Ft. Dodge, Ia., $118,400. Noted Sept. 27.

★Kan., Topeka—Shawnee Co. let contract building 140 ft. Rainbow arch bridge over Soldier Creek on Kansas Ave., to Leavenworth Bridge Co., $25,800. Noted Aug. 30.

★Tex., Gainesville—Gainesville Red River Bridge Co. let contract building bridge over Red River at Sacra's Ferry, 7 mi. north of Gainesville, to Midland Bridge Co., 504 Midland Bldg., Kansas City, Mo., $60,000.

STRUCTURAL STEEL WORK

BIDS DESIRED

S. C., Charleston—See "Bridges."

Ill., Havana—See "Excavation and Dredging."

Ill., Utica—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Butler—See "Bridges."

REINFORCED CONCRETE

Proposed Work

N. J., Red Bank—See "Bridges."

Minn., Duluth—See "Industrials."

Wash., Olympia—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., New York—See "Industrial Works."

★N. J., Bayonne—See "Industrial Works."

★Ia., Ft. Dodge—See "Bridges."

★Cal., Manhattan Beach—See "Miscellaneous."

★Cal., San Diego—See "Miscellaneous."

★B. C., Vancouver — See "Industrial Works."

STREETS AND ROADS

Proposed Work

Mass., Revere—City issued $70,000 bonds to build roads on main thoroughfares in different sections of city. C. G. Richmond, supt. pub. wks.

N. Y., Buffalo—City plans to hard-surface portion Deer, Devereau and Cordova Sts.; also pave portion Congress St., asphalt on concrete foundation. G. H. Norton, city engr.

N. J., Jersey City—Bd. Freeholders Hudson Co. soon receives bids paving Palisade and Bergenline Aves.

Pa., Erie—City election in November to vote on $1,400,000 bond issue to build roads. F. G. Lynch, city engr.

Pa., Shinglehouse — Boro. plans to pave Academy St., 1½ mi., with State aid.

Va., Staunton — City having plans prepared macadam and asphalt pavement on various streets. About $20,000. H. H. Wyat, mayor.

N. C., Ayden—City voted $15,000 bonds to improve roads.

N. C., Fremont — Town plans to issue $20,000 bonds to improve streets, sidewalks and install electric-light plant.

N. C., Hickory — City voted $150,000 bonds to pave various streets.

Ga., St. Mary's—Camden Co. plans election to vote on $100,000 bond issue to build roads.

Fla., Key West—Monroe Co., Cape Sable Dist., voted $60,000 bonds to build 22 mi. road to connect with Ingraham Highway in Dade Co.

La., Baton Rouge—East Baton Rouge Co. plans to sell $50,000 bonds Nov. 13 to complete and maintain cross roads in Dist. No. 2.

O., Bellefontaine—Logan Co. sold $24,000 bonds to improve roads.

O., Cincinnati—City lets contract about Dec. 8, paving, curbing, and building walks on portions Seager Ave. F. Krug, city engr. Noted Sept. 20.

O., Defiance—City plans to pave portions Thurston and Summit Sts., also 5th and Holgate Aves. About $65,000. V. D. Weinsenberger, clk.

O., East Youngstown—City plans to issue $12,000 bonds to pave portions Robinson Rd., and $15,000 bonds to pave 12th St.

O., Germantown—(Official)—Village received no bids Oct. 10 paving West Market St., tarvia bound macadam and combined curb and gutter. New bids in spring. C. A. Eby, clk. Noted Oct. 4.

O., Sidney—City election Nov. 6 to vote on $40,000 bond issue to open and extend Poplar St. T. Blake, city engr.

O., Toledo — Lucas Co. sold $182,316 bonds to improve roads.

O., Toledo—City passed resolution to improve and pave portion Baker, Brown, 13th, Berkley and Raymer Sts. H. McKechnie, engr.

O., Youngstown—City plans to pave portions Ravenwood, Japan, and Belden Aves.; also build sidewalks on portions Dupont St. F. M. Lillie, city engr.

Michigan — (Official) — State Highway Comn., Lansing, rejected bids opened Oct. 24, building water-bound macadam roads in Allegan Co., Ganges Twp. Work will be readvertised. Noted Oct. 18.

Michigan — (Official) — State Highway Dept., Lansing, plans to grade, drain and clear roads in Barage Co. About $200,000. J. H. Bateman, state highway engr.

Mich., Petoskey — Emmet Co. plans to spend $70,000 for road work during year. Main trunk line highways across county from north to south and Dixie and Michigan Highways will be improved.

Mich., Pontiac—Oakland Co. voted $250,000 bonds to build roads.

Ill., Waukegan—Lake Co. plans election soon to vote on $500,000 bond issue to build roads, including east and west road and road from Belvidere to Volo, 15 mi., concrete, to cost $310,000.

Wis., Grand Rapids—City having plans prepared improving paving following streets, rein.-con.: Oak St., 8101 sq.yd. paving, 4704 lin.ft. curb, 4130 yd. grading; 8th St., 5170 sq.yd. paving, 3000 lin.ft. curb, 2750 yd. grading; Lincoln and 5th Sts., 5218 sq.yd. paving, 3030 ft. curb, 2777 yd. grading; also paving portions Grand Ave., brick, 6044 sq.yd. About $38,000. J. Wheir, pres. bd. pub. wks.

Ia., Red Oak—See "Sewers."

Ia., Rockwell City—Calhoun Co. plans to gravel 18 mi. road. About $44,595 available. State and Federal Government to appropriate toward cost.

Minn., Fergus Falls—Ottertail Co. voted to accept $30,000 Federal Aid and to appropriate same amount to improve road from Ashby to this city. W. Lincoln, aud.

Minn., St. Cloud—Stearns Co. will receive $50,000 from Federal Government to build roads during 1918. N. Thomey, co. aud.

Minn., St. Paul—City plans to pave portions Raymond Ave. About $114,438. O. Claussen, city engr.

Kan., Cottonwood Falls—Chase Co., Cottonwood Falls and Strong City plan to build 2 mi. rock road to connect Cottonwood Falls and Strong City.

Kan., Council Grove—City to sell $36,000 bonds to pave, curb, and grade certain streets. H. W. Craven, clk.

Mont., Billings—Council plans to pave portion 1st Ave. About $15,000. E. M. Schneckenberger, city engr.

Mo., Kansas City—Council passed ordinance to pave portions 38 streets. C. Hill, city engr.

Arkansas—Arkansas-Louisiana Highway Impvt. Dist. plans to determine road construction detail within 30 days; will issue $2,500,000 bonds and probably $1,000,000 later to build 177 mi. highways in Chicot, Desha, Ashley, Lincoln, and Drew Cos. E. P. Toney, Lake Village, chn. com.

Ark., Berryville—Carroll Co. plans to build 70 mi. road. Noted Aug. 2.

Ark., Magnolia — Columbia Co. Comrs. had plans prepared by State Highway Dept., Little Rock, building road from Magnolia to Ouachita Co. line, 13 mi. About $68,987.

Tex., Belton—Bell Co. plans election to vote on $300,000 bonds to build roads.

Tex., Brady — McCulloch Co. plans to build Puget Sound to Gulf Highway with State aid. About $20,000.

Tex., Crockett — Houston Co. election Nov. 17 to vote on $50,000 bond issue to build streets. A. E. Owen, co. clk. Noted Aug. 16.

Tex., Jasper—Jasper Co. voted $250,000 bonds to build roads. A. L. Hancock, co. clk. Noted Sept. 27.

Tex., Kountze—Hardin Co. plans to issue $200,000 bonds to improve roads.

Tex., San Angelo—Tom Green Co. defeated $200,000 bond issue to improve roads. Noted Sept. 27.

Tex., San Augustine—San Augustine Co. voted $52,000 bonds; $48,000 of this amount to be expended on East Texas Highway, 36 mi., remaining $4000 to improve feeder roads to highway.

Tex., Waco—McLennan Co. plans to build China Springs Rd., gravel with asphalt top; also Marlin Rd., 11½ mi. About $12,500 respectively. State Highway Dept. appropriated $30,000 of Federal Government fund for road work in this county. R. J. Windrow, co. engr.

Okla., Sallisaw—(Official)—Sequoyah Co. voted $18,000 bonds to build roads and bridges in Paw Paw Twp. Noted Oct. 4.

Okla., Tulsa—Tulsa Co. election Nov. 20 to vote on $1,750,000 bonds to build roads.

Idaho, Burley—See "Sewers."

Ariz., Prescott—Bd. Superv. Yavapai Co. voted to build road between Prescott and Jerome. About $78,000 available from State road fund and $47,000 from Federal road fund.

Ariz., Tombstone — Cochise Co. election Dec. 4 to vote on $1,000,000 bonds to build road from Pearce to highway running through Sulphur Springs Valley, also paving roads between Bisbee and Douglas and Wilcox and Pearce.

Washington—State Highway Comn., Olympia, soon receives bids improving Pacific Highway between Vancouver and La Center. About 3½ mi.

Washington—(Official) — State Highway Comn., Olympia, rejected bids opened Oct. 22, grading and draining 12 mi. Sunset Highway. Noted Oct. 11.

Wash., Auburn—City plans to pave East 1st St., et al. About $10,000.

Wash., Castlerock—Town passed resolution creating Local Impvt. Dist. No. 6, providing for construction concrete sidewalks, cross walks, curbs, etc. About $14,000.

Wash., Davenport—Lincoln Co. plans to build North Central Highway to commence at Mohler. About $28,000. Noted Oct. 11.

Wash., Olympia—See "Bridges."

Wash., Seattle—City plans paving, building curbs, sidewalks, and grading portions 10th, 11th and 12th and Northlake Aves., Wall, Bay and Broad Sts.; also had plans prepared paving portions Colorado Ave., brick block, and 8th Ave., N. E. About $11,000 and $106,456 respectively. A. H. Dimock, city engr.

Oregon—State Highway Comn., Salem, approved Post Rd. project on John Day Highway, between Fossill and Sarvice Creek, Wheeler Co., about 9.47 mi. long. Cost, $36,733.

Oregon — State Highway Comn., Salem, soon lets contract building 1½ mi. road between Mitchell and Prineville, Wheeler Co. About $12,500.

Streets and Roads (Continued)

Ore., Eugene—Council passed ordinance to macadamize Potter St. and 28th Ave., et al. About $12,000. A. Forneri, city engr.

Ore., La Grande—Union Co. having plans prepared for building road to Baker Co. line.

Ore., Warrenton — City voted $45,000 bonds to build road from Warrenton direct to ocean beach. Noted Sept. 13.

Cal., Los Angeles—City soon lets contract grading and paving portion Azusa Ave., Rd. Dist. No. 135, 5 in concrete pavement, 20 ft. wide. A. C. Hansen, city engr.

Cal., Porterville—City having plans prepared for paving streets to connect with county highway system.

Cal., San Diego—City plans to pave A, Ash, Beech, Cedar, 7th, and 8th Sts. About $51,810. G. Cromwell, city engr.

Cal., San Luis Obispo—Valmount Country Club plans to build 4½-mi. macadamized road near Moro Beach.

Cal., Willows—Glenn Co. election Nov. 10 to vote on bond issue to improve highway from Hamliton City to Orland, 14½ mi.

Ont., Port Colborne—Council plans to build cement sidewalks on various streets. About $15,000.

Ont., Toronto—City plans to extend Chaw and Crawford Sts. and fill in Sully Crescent. About $30,000.

BIDS DESIRED

N. Y., Brooklyn—Until Nov. 2, by L. H. Pounds, boro. pres., regulating and recurbing easterly side 12th Ave., from 52nd to 53rd St.; grading sidewalk space and laying sidewalks west side 18th Ave. between 61st and 62nd Sts.; laying sidewalks at 3 other locations; furnishing and delivering 40,000 wood paving blocks, 4 in depth; 2000 bbl. portlant cement; 3000 cu.yd. paving sand; 3000 cu.yd. 1½-in. broken stone for concrete; 1500 cu.yd. broken trap rock and 1000 cu.yd. trap-rock screenings.

N. Y., Brooklyn—Until Nov. 9, by L. H. Pounds, boro. pres., regulating, paving and repaving portion 54th St., asphalt on 6-in. concrete base.

N. J., Elizabeth—Until Nov. 8, by Bd. Wks., repaving Cross Ave., sheet asphalt on concrete foundation, involving 6155 sq.yd. asphalt, 4710 lin.ft. 4 x 16-in. bluestone curb, etc. J. F. Kenah, clk. T. E. Collins, city engr.

N. J., Jersey City — (Official) — Until Nov. 8, by City, improving portion Gates Ave., involving 4420 sq.yd. asphalt paving on concrete base, 550 sq.yd. Belgian block paving on concrete base, together with curbing, grading, etc. C. A. Van Kuren, city engr. Noted Oct. 18.

Ga., Gibson—(Official)—Until Nov. 10, by H. G. Sammons, comr. roads and revenues, Glascock Co., furnishing and delivering at depot, 200,000 brick, to grade equal to brick manufactured at Milledgeville; also 200 sacks cement, 200 bbl. lime.

Ala., Brewton—Until Nov. 19, by Escambia Co., building 9 mi. Forest Highway between Brewton and Andalusia; work involves 30 acres clearing and grubbing, 44,182 cu.yd. borrow, 1050 ft. pipe, etc.

Tenn., Clarksville—(Official)—Until Nov. 15, by City, paving portions 3 streets, 15,000 sq.yd. asphalt concrete on concrete base. S. R. Alexander, city engr. Noted July 26; advertised in this issue.

O., Cincinnati—(Official)—Until Nov. 9, by Hamilton Co. Comrs., resurfacing Harrison and Brookville Turnpike, bituminous macadam. A. Reinhardt, clk.

O., Cincinnati—(Official)—Until Nov. 16, by Hamilton Co. Comrs., improving portion Camargo Pike No. 292. A. E. Mittendorf, pres.

O., Montgomery—Until Nov. 7, by Town, improving and paving portion West St. C. W. Harnell, clk.

Ia., Des Moines—Until Nov. 5, by F. Jeffries, city clk., curbing and paving Douglas and Beaver Aves., including 26,900 yd. paving, 15,840 ft. curbing. K. Kastberg, city engr. Noted Aug. 16.

Neb., Holdrege—Until Nov. 20, by W. Lindstrom, city clk., improving streets in Dist. No. 1, including 39,100 sq.yd. pavement, 4442 ft. curb, 10,053 lin.ft. curb and gutter.

Mont., Butte—(Official)—Until Nov. 5, by Silverbow Co. Comrs., for paving, building sidewalks, parkings and curbs in Dist. No. 3. S. L. Anderson, clk. Noted Oct. 18.

Mo., Kansas City—See "Sewers."

Ariz. Globe—(Official)—Until Nov. 7, by Bd. Superv. Gila Co., building Sects. 1, 2, and 3 El Capitan Highway. About $75,000. Noted July 26.

Wash., Seattle—Until Nov. 19, by N. M. Wardall, clk., King Co., building Morris Change Rd.

Oregon—Until Nov. 6, by State Highway Comn., Salem, building Columbia River Highway between Hood River and Mosier, 5 mi. About $352,000. H. Nunn, state highway engr. Noted Sept. 27.

California — Until Nov. 12, by State Highway Comn, Sacramento, paving 3 mi. road in Monterey Co., concrete, grading 9 mi. in Nevada Co.; paving 12 mi. road in San Luis Obispo Co,. concrete.

Cal., Oakland—Until Nov. 5, by E. Gross, clk., Alameda Co., building highway connecting East 14th St. with Dublin Blvd. About $80,000.

Cal., Santa Ana—Until Nov. 7, by N. T. Edwards, clk., Orange Co. building 48,000 sq.ft. concrete pavement on San Juan Hot Springs Rd.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass. Boston—City let contract grading and playground surfacing to J. C. Coleman & Sons, 1620 Tremont St., Roxbury, $20,000. Noted Oct. 18.

★Connecticut — State Highway Dept., Hartford, let contract building state road in Woodbury Twp., to J. De Michiel & Bro., 58 High St., Torrington, $29,500. Noted Oct. 4.

N. Y., Brooklyn—L. H. Pounds, boro. pres., received low bids regulating, curbing and paving portion (a) Ave. M, (b) Snyder Ave., (c) West 36th St., from Cranford Co., 52 9th Ave., (a) $15,095, (b) $11,610, (c) $11,985; Uvalde Asphalt Paving Co., 1 Bway., New York City, (a) $16,025, (b) $11,947, (c) $12,499; Borough Asphalt Co., 1301 Metropolitan Ave., (a) $18,514, (b) $10,912, (c) $12,277. Noted Oct. 25.

★N. Y., Buffalo—City let contract paving portions Washington St., block sandstone on concrete foundation to Erie Contg. Co., Morgan Bldg., $29,500.

N. Y., Buffalo—City received lowest bid paving portions Stewart Ave., asphalt on concrete foundation, from German Rock Asphalt Co., Inc., Morgan Bldg., $13,450.

N. Y., New York—(Official)—M. M. Marks, boro. pres., received low bids, Oct. 24, repaving portions various streets, wood block, from W. J. Fitzgerald, 547 West 45th St.; 4th Ave., $10,272; B'way., $37,324; same street (water-gas-tar specifications), $42,658; Madison Ave., $31,341.

N. Y., Utica—W. W. Wotherspoon, state supt. pub. wks., Albany, received low bids building approaches, grading, and paving south side of Erie Canal to bridge over canal in Yorkville, from L. J. Sieling, 171 Madison Ave., New York City, $14,382; C. Kiehm, Gardner Bldg., $15,998.

N. J., Jersey City—(Official)—City received low bids Oct. 23, repaving portion Tonnele Ave., wood block, from P. O'Reilly, 86 Neptune Ave., 138%; J. J. Conlin, 1123 Bway., New York City, 140%. Estimated cost, $22,875. Noted Oct. 11.

N. J., Jersey City—City received lowest bid improving Dwight St. and De Kalb Ave., asphalt paving on concrete base, Van Cleef St. and Germania Ave., bituminous concrete on concrete base, from W. S. S. Crichfield, 2 Green St., about $33,357. Noted Oct. 11.

★N. J., Paterson—City let contract paving portions Prince St., to L. Cramer, 99 Ward St., $12,128.

★Pa., Milton—Boro. let cotnract about 2500 sq.yd. vitr. brick paving, to W. H. Lyons, Sunbury, $12,000.

Pa., Phila.—City received only bids Oct. 10th paving and sewers in Delaware Ave. from Mifflin St. to Snyder Ave., from E. H. Vare, Lincoln Bldg., $98,862.

★Pa., Pittsburgh—Alleghany Co. let contract improving Rouna Hill Rd. in Forward Twp., 12,500 ft. long, to R. A. Peterson, $34,324. Noted Sept. 6.

★W. Va., Charleston—Kanawha Co., Loudon Dist., let contract building 3,2 mi. brick on concrete road, also 5 mi. slag road, to Central Eng. Co. About $90,000. Noted Sept. 27.

★N. C., Pittsboro—Chatam Co., let contract grading roads and surfacing with top soil or gravel, to C. C. Jordan, Wadesboro, $30,000. Noted May 10.

★Alabama—State Highway Dept., Birmingham, let contract building 5.3 mi. road in Blount Co., between Blountsville and Guntersville, to Sharp Bros., Guntersville.

★Ala., Carrolton—Pickens Co. let contract building 50 mi. of roads, involving 165,000 cu.yd. grading, 40,750 cu.yd. gravel, also bridges, to Stanley-Signer Constr. Co., Lafayette, about $60,000. Noted Sept. 6.

★La., Crowley—City let contract building gravel pavement, also curb and gutter, to Healy Constr. Co., Crowley. About $30,000.

★Ohio—(Official)—State Highway Comn., Columbus, let contracts road work to C. Stoltz, Bellevue, Sect. "L," Bellevue-Norwalk Rd., Huron Co., 1.68 mi., monolithic brick, $40,745; J. L. McCormick, Canton, Sect. "R," Akron-Canton Rd., Summit Co., 2.08 mi., brick, $64,501; A. McDonald, Steubenville, Sect. "N2," Steubenville-Cambridge Rd., Jefferson Co., 1.83 mi., brick on rolled base, $65,830; M. Snoffer, 144 East 13th Ave., Columbus, Sects. "M" and "O," Columbus-Sandusky Rd., Franklin Co., brick on concrete base, $12,425. Noted Oct. 18.

★O., Dayton—City let contract paving portions River St., to J. Kernan & Co. About $15,000.

★Mont., Great Falls — Cascade Co. let contract building Riceville Rd., to F. Elliot, $12,000.

★Mont., Hardin—See "Sewers."

★Mo., St. Joseph—City let contract paving portions 27th St., vertical fiber brick, to Land Constr. Co., Ballinger Bldg., $2.44 per sq.yd.

★Mo., Springfield—City let contract paving to Jarret-Richardson Paving Co., $1.65 per sq.yd.; curbing to M. H. Southworth Constr. Co., 49c. per lin.ft.

★Tex., Dallas—(Official)—Dallas Co. Comrs. will resurface by day labor Richardson Rd. from Vickery to Richardson; Maple Ave. Rd. from city limits to railroad crossing; also California Crossing Rd. About $20,000. J. F. Witt, co. engr. Noted Oct. 18.

★Tex., Dallas—City let contract paving portions Peak St., to Bramley-Lanham Paving Co., Kingsley St., Birmingham, Ala., $23,004.

★Tex., Eagle Pass—City let contract paving Main and Commercial Sts., 50,000 sq.yd., to Uvalde Asphalt Co., Sweringen McCraw Bldg., San Antonio.

★Tex., Ft. Worth—City let contract paving 11,500 sq.yd. Travis Ave., to General Constr. Co., F and M Bank Bldg., Ft. Worth, $2.05 per sq.yd. Noted Oct. 25.

★Idaho—State Highway Comn., Boise, let contract building 17 mi. North and South Highway between Fruitvale and Price Valley, Adams Co., to Nettleton, Bruce & Eschbach, Amer. Bank Bldg., Seattle, Wash., $75,000; 38 mi. Idaho and Pacific Highway through Burley Highway Dist., to H. E. Cornell, Ditriech, $80,000.

★Idaho, Albion—Cassia Co. let contract loading, hauling and spreading gravel on 3 sections Idaho-Pacific Highway in Burley Highway Dist., about 57.5 mi., to H. E. Cornell, Dietrich, $80,000. Noted Oct. 18.

★Idaho, Council—Adams Co. let contract building 17 mi. North and South highway between Fruitvale and Price Valley, to Nettleton, Bruce & Eschbach, 903 Amer. Bank Bldg., Seattle, Wash., $75,000.

★Utah—State Rd. Comn., Salt Lake City, let contract building road leading out of Payson bitulithic, to Strange & Maguire, Savings & Trust Bldg., Salt Lake Sity.

★Ore., Portland—City let contract paving Woodstock Ave., gravel bitulithic, to Warren Constr. Co., Journal Bldg., $25,000.

★California —(Official)— State Highway Comn., Sacramento, let contract to Municipal Impvt. Co., 803 MacDonald Bldg., Richmond, building 12.4 mi. road in Sonoma Co. and 7.7 mi. in Butte Co., $133,111 and $56,240 respectively; E. J. Tracy, Sheldon Bldg., San Francisco, 16 mi. highway in Marin Co., $173,347. Noted Oct. 25.

Streets and Roads (Continued)

Cal., San Diego — City received lowest bid building 413,491 sq.ft. 4-in. concrete pavement, 2056 ft. cement curbs, culverts, concrete wall, etc., in Prospect St., La Jolla Blvd. and other streets, from T. C. Breitenstein, 465 Van Wyck St., Pasadena, $54,496.

Cal., San Francisco—City let contracts improving streets, (a) excav., (b) granite curbs, (c) concrete curbs, (d) concrete sidewalks, (e) asphalt pavement, (f) basalt-block pavement, gravel filler on concrete base, as follows: C. B. Eaton, 407 11th St.; Clement St., (a) $0.50 per cu.yd., (b) $1.25 per ft., (d) $0.13 per sq.ft., (e) $0.22 per sq.ft. State Impvt. Co., Crocker Bldg.; 18th Ave., (c) $0.83, (d) $0.16, (e) $0.25. J. F. Dowling, San Francisco; Francisco St., (b) $1.75, (d) $0.17, (f) $0.48 per sq.ft., basalt block gutters, $0.48 per sq.ft. Hoffman Ave., (c) $0.95, (e) $0.55. Flinn & Tracey, 1st Natl. Bank Bldg., (b) $0.80, (d) $0.14, (e) $0.24, 10-in. vitr. culvert, $1.50 per ft. T. A. Clark, San Francisco; (a) $1.10, (c) $0.80, (d) $0.15, (e) $0.2275, brick manholes, $85 each, brick catch basins, $100 each. Blanchard-Brown Co., Call Bldg., (b) $1.25, (e) $0.26. Fay Impvt. Co., Phelan Bldg.: Balboa St., (b) $1.25 per ft., (d) $0.14, (e) $0.25.

Cal., Stockton—San Joachim Co. received lowest bid, Oct. 10th, building 5½-mi. crushed rock or gravel macadam road, from Moring Bros., Stockton. About $37,612 and $30,366 respectively. Noted Sept. 13.

Ont., Cornwall—County received 23 bids for building 60 mi. water-bound macadam roads in Stormont, Dundas and Glegarry Cos. Contract will be let Jan. 24th. J. G. Cameron, co. rd. supt. Noted Oct. 11.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Kentucky—Middle Fork & South Fork Ry., recently incorporated, plans 29-mi. line from Krypton to mouth of Buffalo Creek. W. H. Porter, 222 Clay Ave., W. E. Williams, 1308 Fayette Natl. Bank Bldg., A. R. Stephens, 17 Mentelle Park, and others, all of Lexington, incorporators.

Texas—Eastern Traction Co., recently organized, plans to build interurban electric railway from Houston, Tex., to Lake Charles, La., via Beaumont, about 160 mi. E. Kennedy, 509 Foster Bldg., Houston, and others, interested.

Washington—H. C. and J. Erickson of Krupp, Wash., plan to build railroad from Peteros to Winthrop in Methow Valle 45 mi.

Ontario—Brandon Municipal Ry. plans to build line to Lake Piercy. About $55,000. T. Boden, City Hall, Brandon, supt.

RAILWAYS—STEAM AND ELECTRIC

(★Indicates contracts awarded.)

★Ontario—Essex Terminal Ry., Walker Rd., Walkerville, let contract extending electric railway in Ojibway, to Chick Contg. Co., McDougall St., Windsor, $60,000.

EXCAVATION AND DREDGING

Proposed Work

Wash., North Yakima — Canal — Selah Valley Canal Co. plans to spend $50,000 to cement canal and build 700-ft. tunnel. Ultimate expenditure on project, $300,000.

BIDS DESIRED

Ill., Garden Prairie — Drainage — Until Nov. 15, by Coon Creek Drainage Comrs., for 6 mi. 6-27-in. tile drain, clay, cement, shale or vitr. pipe. A. McCae, secy. A. L. Webster, Wheaton, engr.

Ill., Havana—Ditches—Until Nov. 12, by Bd. Comrs. Garden Special D. D., Mason Co., building main ditch and laterals, involving 194,342 cu.yd. excav., removing and replacing 6 steel highway bridges, etc. J. F. Kreiling, comr.

Wis., Madison — (Official) — Drainage — Until Nov. 16, by Orchard Farm Garden Sub-District, Dane Co., at office of Buell & Lucas, 9 South Picchney St., Madison, building tile drainage system, involving 156,397 ft. 4-14 in. tile. A. K. Reindahl, comr.

Ia., Ft. Dodge—Drain—Until Nov. 8, by Webster Co., building Drain No. 258, involving 15,300 ft. 16-30 in. tile. About $21,190. J. L. Hanrahan, aud.

Ia., Mason City—Drainage—Until Nov. 7, by Cerro Gordo Co., building D. D. No. 49; Sect. 1 involves 8200 ft. 9- to 28-in. tile, Sect. 2, 17,950 ft. 8-18-in. tile. G. E. Frost, aud.

Minn., Granite Falls—Ditch—Until Nov. 13, by Yellow Medicine Co., building Judicial Ditch No. 7, involving 23,321 ft. 5-24 in. tile. About $20,616. G. H. Wilson, aud.

S. D., Armour—Drain—Until Nov. 2, by Douglas Co., building Drain No. 4; work involves open ditch 5 mi. long, 30,000 cu.yd. excav. and 750 ft. 20-in. tile. Dakota Eng. Co., Mitchell, engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ind., Rockport — (Official) — Ditches—Spencer Co. let contract building ditches, to J. A. Rahests, Ashland, O., $37,755. Noted Oct. 4.

★Minn., Henderson—Ditch—Sibley Co. let contract building Judicial Ditch No. 8, to Arlington Cement Stone Wks., $11,474.

★Mont., Lewiston — Canal, etc. — Fergus Co. Land & Irrigation Co. let contract for chief distributing canal and laterals, Flatwillow Project, to C. E. Weir, Lewiston, $411,720.

★Idaho, Fruitland — Irrigation — Little Willow Valley Irrigation Dist. let contract installing irrigation system, to Maney Bros., Shaw Bldg., Boise, $175,000.

INDUSTRIAL WORKS

Proposed Work

N. Y., Brooklyn—Rubel Bros., Glenmore Ave., had plans prepared by E. M. Adelsohn, archt, 1776 Pitkin Ave., for 2 story, 100 x 200 ft. ice manufacturing plant, Blake and Van Sinderen Aves. About $75,000.

N. Y., New York—P. Schalita had plans prepared by S. Brooks, archt., 110 West 40th St., for 2 story, 100 x 100 ft. garage, Washington Ave. and 182nd St. (Bronx boro.). About $50,000.

N. J., Newark—Lackawanna Bridge Co., 2 Rector St., New York City, plans two 1-story, 60 x 630 ft. brick and steel shops; also two 2-story, 60 x 60 ft. shops, head house, train shed, and employees' hospital at Port Newark Terminal. About $252,000 and $28,000 respectively.

Pa., Phila.—Atlantic Refining Co., 3144 Passyunk Ave., plans 82x84-ft. power house on Passyunk Ave. and 28th St. About $50,000.

Del., Wilmington—Pusey & Jones, foot Poplar St., plans to build foundry and pattern store room. About $70,000 and $50,000, respectively.

Va., Norfolk—Norfolk Tire Fabric Co., recently incorporated, having plans prepared by R. E. Mitchell, archt., Paul-Gale Greenwood Bldg., for factory to consist of 10 units; 1st unit 262x625 ft. About $750,000. B. C. Brownell, interested.

La., Monroe—A. Brown, 1st Natl. Bank Bldg., Pittsburgh, Pa., and others, plan to build carbon plant here. About $200,000.

La., New Orleans—Swift & Co., Harvey Lane, plans to build acid factory here. About $250,000.

O., Cleveland—Acorn Refining Co., 8205 Franklin Ave., having plans prepared by A. F. Janowitz, archt., Permanent Bldg., for 2-story factory, 8204 Franklin Ave., N. W. Cost between $45,000 and $50,000.

Ind., Anderson—Superior Tire Co., recently organized with $750,000 capital stock, purchased 10-acre site and plans to build factory. W. I. O'Bryan, 1331 Fry Ave. Cleveland, Ohio, vice-pres.

Ind, Indianapolis—Standard Paper Co., 440-50 South Illinois St., having plans prepared by Vonnegut & Bohn, archts., 610 Indianapolis Trust Bldg., 3 story, 100 x 200 ft., 326 East Market St. About $80,000. A. M. Rosenthal, pres.

Mich., Port Huron—Mueller Mfg. Co., 512 Cerro Gordo St., Decatur, Ill., and Sarnia, Ont., soon lets contract 1-story, 80 x 140 ft. factory and power plant, foot of Lapeer Ave. About $200,000. J. Londoun & Hertzberg, Ltd., 37 Toronto Bldg., Toronto, Ont., engrs. Noted Oct. 11.

Minn., Duluth—L. Teweles Seed Co. having plans prepared by Fraser Co., engrs., 667 East Water St., for 7-story, 150 x 180-ft. rein.-con. warehouse, Clybourn St. About $200,000.

Kan., Wichita—McCormick Armstrong Co., 122-24 South Markes St., plans factory 3 story, 100 x 140 ft., steel and concrete, 2nd and Emporia Sts. About $50,000.

Ariz., Golconda—Union Basin Mining Co. plans to rebuild ore-reduction and metal-extraction plants recently destroyed by fire with loss of $250,000. J. D. Wanvig, mgr.

Wash., Seattle—Rodgers-Brown Co. soon lets contract for warehouse and dock on Harbor Island. About $200,000.

Wash., Spokane—Sperry Flour Co., 662 Mallon St., soon lets contract flour mill on East Sprague St. About $300,000. Noted Oct. 11.

Cal., Santa Barbara—E. W. Alexander having plans prepared by R. F. Sauter, archt., for 117x205-ft. garage on Victoria St. About $60,000.

Cal., Stockton—Nat'l Paper Products Co. having plans prepared for factory in Western part of city. About $1,000,000. J. B. Zellerbach, San Francisco, pres.

Que., Cap De Madeleine—Canada Steamship Lines, 9 Victoria Sq., Montreal, plans to build shipyards here. About $100,000.

Que., Montreal—Independent Silk Co., 52 Nazareth St., soon lets contract for factory. About $60,000. G. A. Nonette, 83 Craig St., archt.

Que, Montreal—T. M. Kirkwood of Three Rivers Shipyards, Ltd., Three Rivers, plans shipbuilding plant. About $500,000.

B. C., Vancouver—Pacific White Lead Co. plans to build plant on Industrial Island. About $50,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I. ,Bristol—National India Rubber Co. let contract 3-story, 60 x 202 ft. brick factory, to W. H. Hamlyn & Son, 35 Greenwich St., Providence.

★N. Y., Buffalo—American Radiator Co., 1807 Elmwood Ave., let contract 1 story foundry, to Austin Co., 14230 Euclid Ave., Cleveland, O. About $150,000. Noted June 28.

★N. Y., New York—Pouch Terminal Co., Clifton, S. I., let contract 7 story, 120 x 160 ft. rein.-con. warehouse, to Fairbault Bldg. Co., 52 Vanderbilt Ave. Noted Sept. 20.

★N. J., Bayonne—Nucoa Butter Co., 5th St., let contract 3 story, 60 x 100 ft. rein.-con. factory on 4th St., to Amer. Concrete Steel Co., 31 Clinton St., Newark.

★N. J., Jersey City—Davis-Bournonville Co., Van Wangen Ave., let contract 4 story, 59 x 100 ft. brick and concrete factory, to J. N. Gill & Co., 1215 Filbert St., Phila.

★Pa., Pittsburgh—Pennsylvania Chocolate Co., 5850 Center St., let contract 7 story factory at 5850 Center Ave., S., to Turner Constr. Co., 242 Madison Ave., New York City. Noted Oct. 4.

★W. Va., Fairmont—Mononga Glass Co., 12th St., let contract 4-story addition to factory to Ferro Concrete Constr. Co., West 8th St., $250,000.

★O., Akron—Wellman Seaver Morgan Co., 3000 Central Ave., Cleveland, let contract 1 story, brick and steel factory, to G. A. Fuller Co., 404 Swetland Bldg., Cleveland. About $1,000,000.

★O., Akron—Williams Foundry & Machine Co., 60 South Cherry St., let contract foundry to Clemmer & Johnson, High and Church Sts., $75,000. Noted Sept. 20.

★O., Cleveland—National Acme Co., 7500 Stanton Ave., S. E., let contract 2-story factory, East 131st St. near Coit Rd., to Master & Mullen Constr. Co., 601 Electric Bldg., $80,000.

★Wis., Milwaukee—Cutler-Hammer Mfg. Co., 12th St. and St. Paul Ave., let contract 7-story, 50x200-ft., to H. Schmitt & Sons, 864 Jackson St. Noted Sept. 27.

★Que., Cedars—Cedar Rapids Power Co., '83 Craig St., Montreal, let contract addition to power plant to Steel Co. of Canada, 1272 Notre Dame St., Montreal. About $450,000. Noted Sept. 6.

★B. C., Vancouver—Canadian Northern Ry. let contract building concrete platforms and train sheds at Canadian Northern Depot, to Northern Constr. Co., Vancouver Block, and C. H. Aldinger Co., Winnipeg, Man. About $150,000.

BUILDINGS

Proposed Work

N. Y., Buffalo — Hospital — Mt. Mercy Academy, 1475 Abbott Rd., having plans prepared by H. Spann, archt., 38 Ardmore Pl., brick, stone and steel. About $200,000.

N. Y., Lake Placid—School—Bd. Educ. having plans prepared by Pember & Campaigne, archts., Ilium Bldg., Troy, 3 story, brick and rein.-con. addition on Main St. About $125,000. M. D. Weaver, pres. Noted Aug. 16.

N. Y., New York—Synagogue—Bnai Israel Congregation had plans prepared by E. Roth, archt., 119 West 40th St. About $100,000 J. Adler, 19 West 26th St., pres.

N. Y., Syracuse—Temple—Labor Temple Assn. having plans prepared by E. E. Battey, archt., 161 West Brighton Ave., 3 story, 50 x 100 ft. brick, at 507-9 East Fayette St. About $50,000.

N. Y., Troy—Armory—City having plans prepared by L. F. Pilcher, state archt., Capitol, Albany, new armory, Beman Park and 15th St., to replace one destroyed by fire. About $300,000.

N. Y., Yonkers—School—Bd. Educ. having plans prepared by H. Chamberlain, archt., 18 Bway., 2-story, 75 x 98 ft. addition to School No. 14. About $50,000.

N. J., Seabright — Hotel — Stockholders Peninsula Hotel, Ocean Ave., plan addition. About $60,000.

Pa., Chester—Hotel—G. Shober, 305 Market St., Phila., soon lets contract, 4-story, 70x80-ft., brick, terra cotta and concrete. E. A. Wilson, 1208 Chestnut St., Phila., archt. Noted May 24.

Pa., Johnstown—Schools—Bd. Educ. approved $400,000 bond issue to build schools.

W. Va., Huntington—Bank and Office—Union Savings Bank Co., 4th Ave. and 9th St., soon lets contract, 10-story, 40 x 90 ft. About $150,000. Bankers Eng. Co., 112 W. 19th St., New York City, archts.

Fla., Miami—Hotel and Store—C. J. Martin receiving bids about Dec. 1, 7-story, 50 x 135-ft. About $137,000. F. V. Newell, 6 North Michigan Ave., Chicago, archt.

Ga., Milledgeville — Sanitarium — State having plans prepared by T. H. De Sayssure, archt. About $200,000.

O., Akron—Club — Akron Eagle Lodge soon lets contract, 3-story, 66 x 165 ft., Market and Summit Sts. About $125,000. Forest Eng. Co., 512 Hippodrome Bldg., archts. Noted Aug. 23.

O., Cleveland—Church—Fourth Church of Christ Scientist had plans prepared by Briggs & Nelson, archts., Rose Bldg., to be built at 1935 East 105th St.

O., East Cleveland—(Cleveland P. O.)—Junior High School—Bd. Educ. had plans prepared by C. S. Schneider, archt., 2248 Euclid Ave., Cleveland, 3-story, brick and concrete. About $100,000.

O., Kenmore — High School — Bd. Educ. soon lets contract, 2-story, 75 x 130 ft. addition. About $125,000. N. P. Ruer, Peoples Savings & Trust Bldg., archt.

Ind., Claypool—High and Grade School—Clay Twp. having plans prepared by H. G. Bowstead, archt., 512 Glass Bldg., Marion, 2-story. About $50,000.

Ind., New Palestine—School—High and Grade School—Bd. Educ. soon lets contract, 2-story, 88 x 110 ft. About $50,000. W. H. Garns, 817 Fletcher Trust Bldg., Indianapolis, archt. Noted July 19.

Ill., Champaign—Hotel—C. F. Hamilton, mgr., Hotel Hamilton, soon lets contract, 12-story, 43 x 193-ft. About $300,000. H. H. Richards, 327 South La Salle St., Chicago, archt.

Kan., Kansas City—Hospital—Providence Hospital having plans prepared by Wight & Wight, archts., 401 1st Natl. Bank Bldg., Kansas City, Mo., 3-story, 18th and Tauronee Sts. About $250,000.

Kan., Sterling—Auditorium and Conservatory — Trustees Cooper College having plans prepared by T. W. Williamson, archt., Central Natl. Bldg., Topeka, 2-story, 100 x 120 ft., brick, stone trimmings, concrete and steel. About $50,000.

Kan., Wichita—Office—C. W. Bitting, 401 Bitting Bldg., plans 8-story addition. About $250,000.

Neb., Columbus—Court House—Platte Co. Comrs. plan. About $100,000 available.

Mont., Missoula — High School — City plans to sell $75,000 bonds to build addition to high school.

Mo., St. Louis—Hotel and Store—Francis Constr. and Realty Co., 400 Debaliviere Ave., having plans prepared by H. J. Harker, archt., Sawyer Bldg., 6-story, brick, stone, terra cotta and rein.-con. About $200,000.

Mo., St. Louis—Telephone—J. R. Timlin, archt., Boatman's Bank Bldg., c/o Southwestern Bell Telephone Co., lets contract about Jan. 1, 3-story, brick, stone and rein.-con. addition. About $50,000.

Ariz., Phoenix — Hospital — Deaconess Hospital of Arizona, Wesleyan University having plans prepared by Marsh & Howard, archts., 619 Bway. Central Bldg., Los Angeles, Cal., rein.-con., brick and hollow tile. About $100,000.

Wash., Tacoma—Theater—D. Gross having plans prepared by R. E. Borhek, archt., Natl. Realty Bldg., 3-story, 90 x 120-ft., 9th and Market Sts. About $50,000.

Cal., Arcata — High School — Bd. Educ. voted $60,000 bonds to build high school.

Cal., Los Angeles—Church—Methodist Bd. Spanish Missions, 225 East 5th St., having plans prepared by Train & Williams, archts., Ex. Bldg., 8-story, 100x100-ft., rein.-con. and brick.

Cal., Sacramento—Exhibit—State having plans prepared for rebuilding exhibit building recently destroyed by fire. About $300,000. G. B. McDougal, state archt.

BIDS DESIRED

Mass., Northampton — Infirmary — Until Nov. 15, by Bd. Trustees Smith College, 2-story, 96 x 100 ft. About $80,000. Putnam & Taylor, Bement Bldg., archts. Noted Sept. 12.

Fla., Tallahassee—Dormitory and Educational—Until Nov. 12, by Florida State College for Women. About $92,000. E. Conradi, pres. Edwards & Sayward, 633 Candler Bldg., Atlanta, Ga., archts. Noted Sept. 6.

O., Bellefontaine — (Official)—Hospital—Until Nov. 7, by Trustees Mary Rutan Hospital, Lawrence Bldg., P. O. Batch, clk. F. L. Packard, Hayden Bldg., Columbus, archt.

O., Cleveland — (Official)—School—Until Nov. 12, by Bd. Educ., Rockwell Ave., and East 6th St., 3-story, 75x175-ft., to be known as Gladstone School. About $100,000. F. G. Hogen, dir. W. R .McCormick, Rockwell Ave. and East 6th St., archt. Noted July 26.

Tex., Eldorado—Court House—Until Nov. 12, by Schleicher Co. Comrs. Bonds for $60,000 voted for work. H. B. Thompson, 1203 Southwestern Life Bldg., Dallas, archt. Noted Apr. 12.

PRICES AND CONTRACTS AWARDED

(★Indicates contract awarded)

★Mass., Lowell—School — Lowell Training School let contract 3-story addition, Wonalancet St., to W. Penn, 263 London St., $100,000. Noted July 12.

Conn., Bridgeport—School—St. Michael's Polish congregation, 310 Sterling Pl., received low bids, from J. H. Johnston, Boston, $108,000; J. G. Roy & Sons, 21 Silver St., Springfield, Mass., $119,580; Casey & Hurley, 201 Devonshire St., Boston, $123,710.

★N. Y., New York—Office, etc.—Herman Motor Truck Corp., 607 West 57th St., let contract 2 story office and 1 story service station, 57th St. near 11th Ave., to Gabler Constr. Co., 402 Hudson St., $60,000.

★N. Y., Thiells—Cottages—F. A. Vanderlip, pres. bd. mgrs., Letchworth Village, let contract 8 cottages, to P. Keeler Bldg. Co., 425 Orange St., Albany, $500,000. Noted Sept. 13.

★Va., Norfolk—Store—Flat Iron Development Corp. let contract, 79x123-ft., to W. T. Gregory, Law Bldg., $50,000.

★W. Va., West Liberty—Normal—State Bd. Control let contract addition, to G. C. Heins, Baltimore, Md. About $75,000.

★Mich., Muskegon—Armory—Chamber of Commerce and State let contract, to Strom-Johnson Co. About $55,000. Noted June 28.

★Ia., Iowa City—School—Bd. Educ. let contract building 3 schools to Read-Macdonald-Brewster, Plymouth Bldg., Minneapolis, Minn., $181,982.

★Ia, Sioux City—Theater—J. E. Martin c/o T. S. Martin Estate, 515 4th Ave., let contract, 5th and Nebraska St., to Riesche & Sanborn, 502 United Bank Bldg., $100,000.

Minn., Minneapolis — School — Bd. Educ. received lowest bid building 2-story, 28 x 70-ft. addition to McKinley Grade School, from Laurence Constr. Co., 624 Plymouth Bldg.

★Mo., St. Louis—Opera House and Apartment—F. L. Cornwell, and associates, La Salle Bldg., let contact, on Olive St. between Grand and Spring Sts., to Francis Constr. & Realty Co., 400 Debaliviere Ave., $800,000.

★Wash., Spokane—Hotel—J. Hetterman, Atty. Realty Bldg., Louisville, Ky., let contract on Main and Monroe Sts., to A. D. Jones Co., 125 Lincoln St., N. Cost between $500,000 and $600,000.

★Ont., Chatam—Bank—Bank of Commece let contract, rein.-con. and brick, to E. Bolton, 168 Park St. About $50,000.

MISCELLANEOUS

Proposed Work

Amusement Park—Jersey City, N. J.—Boulevard Park, Inc., 15 Exchange Pl., plans to build amusement park. About $800,000. J. Milton, corp. counsel.

Elimination of Grade Crossings—Dallas, Tex.—Missouri, Kansas & Texas R.R., (L. F. Lonbladh, ch. engr.), will let contract about Dec. 1 for elevation of tracks over Fairmount, Bowen and Hall Sts., Cedar Springs Rd. and Lemmon Ave.; street grade on all but Bowen and Hall Sts. will be lowered, some of them as much as 10 ft. About $750,000. Noted Apr. 12.

Wharf—Point Isabella, Tex.—Rio Grande Ry., Brownsville, plans to build 1500-ft. wharf. D. A. O'Brien, genl. mgr.

Tunnel — North Yakima, Wash. — See "Excavation and Dredging."

Dock—Seattle, Wash.—See "Industrial Works."

Wharf—Seattle, Wash.—City election in December to vote on $160,000 bonds to build addition to Bell St. wharf. A. H. Dimock, city engr.

Transmission Lines—San Diego, Cal.—Bd. Supervs. San Diego Co. granted 50-year franchise to San Diego Consolidated Gas & Electric Co. to extend electric transmission lines throughout county. H. H. Jones, San Diego, pres. and mgr.

BIDS DESIRED

Incinerator—Okmulgee, Okla.—Until Nov. 5, by R. H. Jenness, comr. finance, building garbage disposal plant. About $19,000. Noted July 26.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pier—New York, N. Y.—W. W. Wotherspoon, supt. pub. wks., Capitol, Albany, let contract building pier foot West 53rd St., Terminal Contr. No. 38, to I. J. Standler & Co., Inc., 118 East 23th St., $266,065. Noted Sept. 27.

★Subway—Parsons, Kan. — City and Missouri, Kansas & Texas Ry. let contract building subway under tracks on Main St., to Kremer Voirol Constr. Co., Century Bldg., St. Louis, Mo., $120,000. Noted Oct. 4.

★Oil Reservoir — El Segundo, Cal. — Standard Oil Co. let contract building 1,000,000 gal. concrete lined oil reservoir, 20 ft. deep, covering 8 acres, to Bent Bros., Central Bldg., Los Angeles.

★Pier—Manhattan Beach, Cal. — (Official)—City let contract building rein.-con. pier to G. W. Harding, Manhattan Beach, $61,000. Noted Oct. 4.

★Dam—San Diego, Cal.—City let contract cyclopean rein.-con. dam, Lower Otay site, to J. Kennedy, Washington Bldg., Los Angeles, $586,737. Wurster Constr. Co. refused to accept contract claiming error of $100,000 in compiling bid.

★Platforms—Vancouver, B. C.—See "Industrial Works."

FEDERAL GOVERNMENT WORK

Proposed Work

N. H., Portsmouth—Track Scales—Bureau Yards and Docks, Navy Dept., Wash., plans to install two 3-rail road-track scales at Navy Yard.

R. I., Melville—Dredging—Bureau Yards and Docks, Navy Dept., Wash., preparing plans. About $26,500.

N. Y., New York—Steel Towers—Bureau Yards and Docks, Navy Dept., Wash., soon receives bids furnishing 24 steel towers, 200 and 300 ft. high, for Cuban Government, delivery f.o.b. Navy Yard, New York.

Wash., D. C.—Addition to Forge Shop—Bureau Yards and Docks, Navy Dept., Wash., preparing plans. About $155,000

Wash., D. C.—Building—Bureau Yards and Docks, Navy Dept., Wash., preparing plans for reconstructing Building No. 105, Optical Shop. About $184,000.

Wash., D. C.—Structural Steel—Bureau Yards and Docks, Navy Dept., Wash., plans to purchase structural steel for seaplane hangar, Hampton Roads, Va.

W. Va., Charleston—Electric Duct System—Bureau Yards and Docks, Navy Dept., Wash., plans.

W. Va., Charleston—Track Scale—Bureau Yards and Docks, Navy Dept., Wash., plans to install one 3-rail road-track scale at Navy Yard.

W. Va., Wheeling—Power House—U. S. Engr. Office, Wheeling, rejected only bid received Oct. 2, building at dam No. 24, Ohio River. Noted Sept. 13.

Ill., Peoria—Barracks—War Dept., Brig. Gen. I. W. Littell, soon lets contract for mobile ordnance school-barracks buildings. About $10,000.

Wis., Clintonville—Barracks—War Dept., Brig. Gen. I. W. Littell, soon lets contract for mobile ordnance school-barracks buildings. About $10,000.

Wis., Kenosha—Barracks—War Dept., Brig. Gen. I. W. Littell, soon lets contract for mobile ordnance school-barracks buildings. About $10,000.

N. M., Farmington—Bridge—Dept. of Interior, Office of Indian Affairs, Wash., D. C., rejected bids opened Oct. 22, building steel highway bridge at Farmington. Noted Oct. 18.

BIDS DESIRED

Mass., Boston—Timber Bulkhead—Until Nov. 19, by Bureau Yards and Docks, Navy Dept., Wash., building at Navy Yard. Noted Oct. 25.

R. I., Newport—Storehouse—Until Nov. 5, by Bureau Yards and Docks, Navy Dept., Wash., extension to general storehouse, Naval Torpedo Sta. About $100,000. Noted Oct. 18.

N. Y., Brooklyn—Emergency Hospital—Until Nov. 12, by Bureau Yards and Docks, Navy Dept., Wash., building at Navy Yard.

Wash., D. C.—Bridge—Until Nov. 20, by Comrs. Dist. Columbia, District Bldg., building 7-span steel plate girder highway bridge, abutments, piers and approaches over tracks Philadelphia, Baltimore & Washington R.R. and Washington R.R., Benning Rd.

Wash., D. C.—Machine Shop—Until Nov. 5, by Bureau Yards and Docks, Navy Dept., Wash., building at Navy Yard. About $1,000,000.

Wash., D. C.—Refrigerating Plant and Brine Circulating System—Until Nov. 19, by Bureau Yards and Docks, Navy Dept., Wash.

Wash., D. C.—Steel Towers—Until Nov. 26, by Bureau Yards and Docks, Navy Dept., Wash., building two 200-ft. steel towers at St. Thomas, Virgin Isles, West Indies.

Va., Norfolk—Electric Elevator—Until, Nov. 19, by Bureau Yards and Docks, Navy Dept., Wash., furnishing and installing in Building No. 16, Navy Yard.

W. Va., Charleston—Distributing System—Until Nov. 5 (change of date), by Bureau Yards and Docks, Navy Dept., Wash., building electric power distributing system at Naval Projectile plant. Noted Oct. 25.

Ala., Decatur—Post Office—Until Dec. 5, by J. A. Wetmore, superv. archt., treas. dept., Wash.

La., New Orleans—Piles, Waling and Lumber—Until Nov. 13, by U. S. Engr. Office, Customhouse, New Orleans, furnishing and delivering piles, waling and lumber on bank or wharves; advertised in this issue.

La., New Orleans—Stone—Until Nov. 27, by U. S. Engr. Office, Customhouse, New Orleans, furnishing and placing on jetties at Southwest Pass, Mississippi River; advertised in this issue.

O., Cincinnati—Machinery, Etc.—Until Nov. 30, by U. S. Engr. Office, Cincinnati, furnishing and installing operating machinery, etc., at Dams Nos. 31 and 35, Ohio River; advertised in this issue.

Wyo., Buffalo—Post Office—Until Nov. 30, by J. A. Wetmore, superv. archt., treas. dept., Wash.; advertised in this issue.

Wyo., Torrington—Laterals—Until Dec. 18, by U. S. Rec. Serv., Torrington, building 15.7 mi. main laterals, Ft. Laramie Unit. North Platte Project, Nebraska-Wyoming, involving 236,700 cu.yd. excava., near Bridgeport-Guernsey line of Chicago, Burlington & Quincy Ry.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I., Ft. Greble—Wharf Extension—Bureau Yards and Docks, Navy Dept., Wash., let contract concrete pile and timber extension to wharf, to Booth & Chase Co., 554 Davol St., Fall River, Mass., $10,268.

★Conn., New London—Power House and Machine Shop—Bureau Yards and Docks, Navy Dept., Wash., let contract, to Biglow & Nichols, 45 East 42nd St., New York City, $150,430. Noted Oct. 25.

★N. Y., Brooklyn—Paving—Bureau Yards and Docks, Navy Dept., Wash., let contract hard macadam roadway to F. J. Gallagher, 490 Park Pl., New York, $2232. Noted Aug. 16.

N. Y., Waterloo—Post Office—J. A. Wetmore, superv. arch., treas, dept., Wash., received low bids, (a) limestone, (b) sandstone, from Hagen Lumber Co., Hickory and Mattes St., Scranton, Pa., (a) $52,841, (b) $53,300; G. Baur, 2746 Bedford Ave., Brooklyn, (a) $54,500, (b) $55,200; W. H. Fissell & Co., 1328 Bway., New York City, (a) $59,900, (b) $62,900. Noted Sept. 20.

★Pa., Ft. Mifflin—Mine Storage Building—Bureau Yards and Docks, Navy Dept., Wash., let contract, to W. Tinker Co., 831 Cherry St., Phila., $23,700. Noted Oct. 18.

★Pa., Phila.—Dispensary—Bureau Yards and Docks, Navy Dept., Wash., let contract, at Navy Yard, to McCloskey & Bahl, 16 Thompson St., $31,137. Noted Oct. 25.

Pa., Phila.—Electric System—Bureau of Yards and Docks, Navy Dept., Wash., received bids, Oct. 15, electric system in foundry and machine shop at Navy Yard, (a) work complete, (b and c), alternate bids, from Commercial Eng. Co., 1526 Sansom St., (a) $26,919, (b) $8241, (c) $18,678; United Electric Co., 1727 Sansom St., (a) $27,500, (b) $8800, (c) $18,700; Jandous Electric Equipment Co., 109 West 31st St., New York City, (a) $30,773, (b) $9448 (c) $21.725. Noted Sept. 27.

★Pa., Phila.—Heating System—Bureau Yards and Docks, Navy Dept., Wash., let contract, furnishing and installing in structural shop, to Enterprise Steam & Hot Water Heating Co., 600 North Howard St., Baltimore, Md., $68,030. Noted Oct. 11.

Wash., D. C.—Experimental Sheet Rolling Mill—Bureau Standards, Wash., received only bid, Oct. 20, from Phila. Rolling Machine Co., Phila., $16,500. Noted Oct. 11.

★Wash., D. C.—Fuel Administration Building—Engr's. Office, War Dept., Wash., let contract to G. A. Fuller Constr. Co., Munsey Bldg. About $300,000.

★Va., Cherrystone—Office Quarters—Bureau Yards and Docks, Navy Dept., Wash., let contract to King Lumber Co., Charlottesville, Va., $18,881.

Va., Norfolk—Building—Bureau of Yards and Docks, Navy Dept., Wash., received bids remodeling quarters No. 8 at Navy Yard (work complete), from Nichols & Lindemann, 522 Seaboard Bank Bldg., $23,990; W. W. Keenan, Charlottesville, $26,440; Nash & Jones, 727 Law Bldg., $27,781.

W. Va., Charleston—Sewerage System—Bureau of Yards and Docks, Navy Dept., Wash., received low bids, Oct. 29, installing at Naval Sta., from Warren Moore, 13th and Market Sts., Philadelphia, $13,387; Reed & Lapsley, South Charleston, W. Va., $14,496; Brown & Floyd, Charleston, W. Va., $17,263. Noted Oct. 25.

S. C., Port Royal—Hospital—Bureau of Yards and Docks, Navy Dept., Wash., received bids emergency hospital building at Naval Hospital Reservation (work complete), from W. D. Hadlow, Jacksonville, Fla., $53,690, and J. L. Crouse, Greensboro, N. C., $60,090.

★Fla., Pensacola—Repairs to Quarters—Bureau Yards and Docks, Navy Dept., Wash., let contract repairing Quarters G and I, to S. F. Fulghum Co., 207 South Palafox St., $3972.

★Fla., Pensacola—Roof Repairs—Bureau Yards and Docks, Navy Dept., Wash., let contract repairing roof building No. 40, to Monk & Eley, 125 South Palafox St., $6000.

Ala., Andalusia—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, (a) limestone, (b) sandstone, from G. W. Stiles Constr. Co., La Salle St., Chicago, (a) $42,365, (b) $43,365; A. Blair, Hill Bldg., Montgomery, (a) $43,752; E. H. Brown, Dothan, (a) $46,200. Noted Sept. 20.

★Miss., Gulfport—Emergency Camp—Bureau Yards and Docks, Navy Dept., Wash., let contract (work complete), to J. Griffith & Son, 112 West Adams St., Chicago, $349,000. Noted Oct. 25.

★Miss., Gulfport—Emergency Hospital—Bureau Yards and Docks, Navy Dept., Wash., let contract (work complete), to J. Griffith & Son, 112 West Adams St., Chicago, $84,000. Noted Oct. 25.

La., Grande Isle—Buildings—E. P. Bertholf, capt. commandant, U. S. Coast Guard, Wash., D. C., received low bids for new buildings and accessories for Coast Guard Station No. 214 (work complete), from J. Riess, 503 Hibernia St., New Orleans, $39,360; J. Thatcher, 60 Park Ave., Brooklyn, N. Y., $41,600; Hanna & Mitchell, Custom House, New Orleans, $43,900. Noted Oct. 11.

★La., New Orleans—Electric Traveling Crane—Bureau Yards and Docks, Navy Dept., Wash., let contract furnishing in machine shop, to Niles-Bement Pond Co., 111 Bway., New York City, $8800. Noted Oct. 18.

★Ky., Louisville—Lock Gates—U. S. Engr. Office, let contract furnishing and building gates for lock No. 43, Ohio River, to Independent Bridge Co., Beaver and Rebecca Sts., Pittsburgh, Pa., $64,700. Noted Sept. 13.

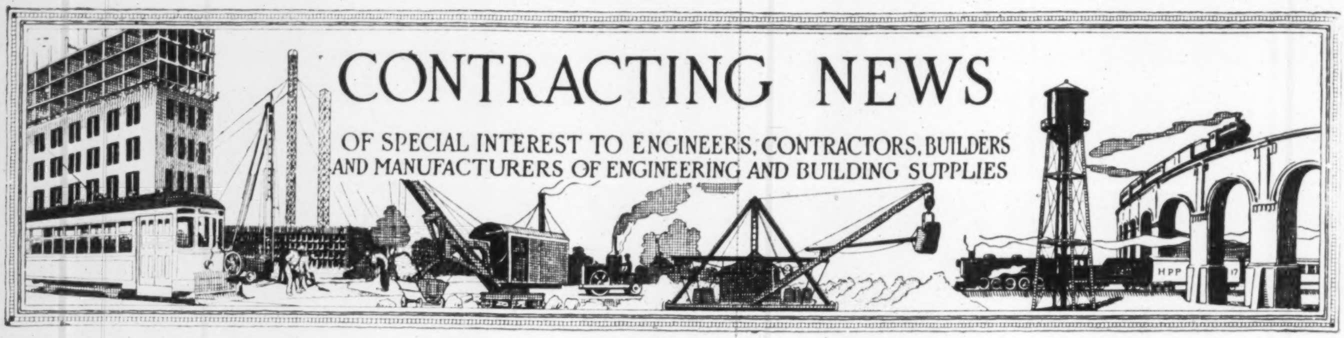
Ill., Mt. Carmel—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, (a) limestone, (b) sandstone, from W. D. Lovell, 1415 South East 8th Ave., Minneapolis, Minn., (a) $52,100; G. W. Stiles Constr. Co., 209 South La Salle St., Chicago, (a) $54,130, (b) $55,630; E. A. Steininger Constr. Co., Victoria Bldg., St. Louis, Mo., (a) $55,935. Noted Sept. 20.

★Ariz., Leupp—Bridges—Comr. Indian Affairs, Wash., D. C., let contract building 2 highway bridges, to Monarch Eng. Co., Kansas City, Mo.

Cal., Bakersfield—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids (a) limestone, (b) sandstone, from C. Wright and A. Hohn, San Francisco, (a) $124,988; H. S. Williams, San Francisco, (a) $129,968; F. O. Engstrum Constr. Co., 2042 East 15th St., Los Angeles, (a) $133,897, (b) $135,197. Noted Sept. 20.

P. R., El Cayey—Building—Bureau of Yards and Docks, Navy Dept., Wash., received low bids, Sept. 30, radio buildings at high power radio station, (a) work complete, (b) net price operator's quarters, power house and receiving building complete (c) net price chief petty officers' quarters, from Hamilton & Chambers, 29 Broadway, New York City, (a) $79,780, (b) $64,780, (c) $17,000; Pittsburgh Des Moines Steel Co., Pittsburgh, Pa., (a) $85,200, (b) $75,000, (c) $11,200; Jesus Demitz, El Cayey, P. R., telegram—bid in mail—not yet received by department. Noted Aug. 30.

p. 189 probably not published.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 48 to 51 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Nov. 10.	Winnipeg, Man. Adv. Nov. 1 and 8.	Nov. 1
Nov. 15.	Chapleau, Ont.	Nov. 1
Nov. 16.	Winnipeg, Man.	Nov. 8
Nov. 19.	Wooster, O.	Nov. 8
Nov. 20.	Charleston, Miss.	Nov. 8
Nov. 26.	Euclid, O.	Nov. 8
Nov. 26.	Winnipeg, Man.	Nov. 8
Dec. 3.	Winnipeg, Man.	Nov. 8

SEWERS

Bids Close		See Eng. News-Record
Nov. 9.	Brooklyn, N. Y.	Nov. 1
Nov. 10.	Sioux City, Ia.	Nov. 8
Nov. 12.	Pleasantville, N. J. Adv. Nov. 1.	Nov. 1
Nov. 12.	Highland Park, Mich.	Nov. 8
Nov. 13.	Lorain, O.	Nov. 8
Nov. 14.	Niles, O.	Nov. 1
Nov. 14.	New York, N. Y.	Nov. 8
Nov. 16.	New York, N. Y.	Nov. 8
Nov. 17.	Appleton, Wis.	Nov. 8
Nov. 19.	Brainerd, Minn.	Nov. 1
Nov. 26.	Oil City, Pa.	Nov. 1
Nov. 23.	Independence, Mo.	Nov. 8

BRIDGES

Bids Close		See Eng. News-Record
Nov. 12.	Minneapolis, Minn.	Oct. 25
Nov. 17.	Charleston, S. C.	Nov. 1
Nov. 17.	Bowling Green, Mo.	Nov. 8
Nov. 19.	Charleston, S. C. Adv. Nov. 8.	Nov. 8
Dec. 4.	West Palm Beach, Fla.	Nov. 8

STREETS AND ROADS

Bids Close		See Eng. News-Record
Nov. 9.	Brooklyn, N. Y.	Nov. 1
Nov. 10.	Gibson, Ga.	Nov. 1
Nov. 10.	Colorado	Nov. 8
Nov. 11.	Princeton, Minn.	Nov. 8
Nov. 12.	California	Nov. 1
Nov. 12.	Lebanon, Ky.	Nov. 8
Nov. 12.	St. Paul, Minn.	Nov. 8
Nov. 12.	Pittsburgh, Pa.	Nov. 8
Nov. 13.	Prestonsburg, Ky.	Oct. 25
Nov. 14.	Minnesota	Oct. 25
Nov. 14.	Phila., Pa.	Nov. 8
Nov. 15.	Indiana	Nov. 8
Nov. 15.	Enterprise, Ala.	Nov. 8
Nov. 15.	Clarksville, Tenn.	Nov. 1
Nov. 15.	Arkansas Adv. No. 8.	Nov. 8
Nov. 15.	Wingdale, N. Y. Adv. Nov. 8.	Nov. 8
Nov. 16.	Cincinnati, O.	Nov. 1
Nov. 17.	Indiana	Nov. 8
Nov. 24.	Charleston, W. Va.	Nov. 8
Nov. 19.	Seattle, Wash.	Nov. 1
Nov. 19.	Brewton, Ala.	Nov. 1
Nov. 20.	Holdredge, Neb.	Nov. 1
Nov. 22.	Hindman, Ky.	Oct. 25
Nov. 23.	Kendallville, Ind.	Oct. 25
Dec. 4.	Tuscumbia, Ala.	Nov. 8

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Nov. 10.	Somers, Wis.	Nov. 8
Nov. 12.	Havana, Ill.	Nov. 1
Nov. 12.	Clarion, Ia.	Nov. 8
Nov. 13.	Granite Falls, Minn.	Nov. 1
Nov. 15.	Garden Prairie, Ill.	Nov. 1
Nov. 15.	Dover Twp., Ont.	Nov. 8
Nov. 16.	Madison, Wis.	Nov. 1
Nov. 22.	Glenwood, Minn.	Nov. 8
Nov. 22.	Memphis, Mo.	Nov. 8
Dec. 6.	Marion, O. Adv. Nov. 8.	Nov. 8

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Nov. 14.	Central Islip, N. Y. Adv. Nov. 8.	Nov. 8

BUILDINGS

Bids Close		See Eng. News-Record
Nov. 12.	Eldorado, Tex.	Nov. 1
Nov. 12.	Cleveland, O.	Nov. 1
Nov. 12.	Tallahassee, Fla.	Nov. 1
Nov. 12.	Sapulpa, Okla.	Nov. 8
Nov. 12.	Eldorado, Kan.	Nov. 8
Nov. 13.	Red Bank, N. J.	Nov. 8
Nov. 13.	Palo Alta, Cal.	Nov. 1
Nov. 14.	Lewiston, Me.	Nov. 8
Nov. 15.	Northampton, Mass.	Oct. 25
Nov. 20.	Pleasant Plain, Ia.	Nov. 8
Nov. 25.	Middletown, Mass.	Oct. 4
Dec. 1.	Norfolk, Va.	Sept. 13
Dec. 1.	Glenville, W. Va.	Nov. 8

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Nov. 10.	Levee Work — New Orleans, La.	Nov. 8
Nov. 10.	Levee Work — Vicksburg, Miss.	Nov. 8
Nov. 12.	Storehouse — Washington, D. C.	Nov. 8
Nov. 12.	Emergency Camp — Gulfport, Miss.	Nov. 8
Nov. 12.	Emergency Hospital—Gulfport, Miss.	Nov. 8
Nov. 12.	Addition to Forge Shop—Washington, D. C.	Nov. 8
Nov. 12.	Heating, Plumbing and Lighting—Chelsea, Mass.	Nov. 8
Nov. 12.	Emergency Hospital—Brooklyn, N. Y.	Nov. 1
Nov. 13.	Piles, Walling and Lumber—New Orleans, La. Adv. Nov. 1 and 8.	Nov. 1
Nov. 13.	Post Office—Harrisonville, Mo.	Oct. 11
Nov. 14.	Post Office—Austin, Tex.	Oct. 11
Nov. 15.	Canals—El Paso, Tex. Adv. Oct. 18.	Oct. 18
Nov. 16.	Maneuver Boats — Wheeling, W. Va. Adv. Oct. 18 to Nov. 8.	Oct. 18
Nov. 19.	Fitting out Cranes—Washington, D. C.	Oct. 18
Nov. 19.	Shipbuilding Ways — Brooklyn, N. Y.	Oct. 25
Nov. 19.	Electric Elevator—Norfolk, Va.	Nov. 1
Nov. 19.	Refrigerating Plant and Brine Circulating System—Washington, D. C.	Nov. 1
Nov. 19.	Timber Bulkheads, Boston, Mass.	Nov. 1
Nov. 19.	Filling—Key West, Fla.	Nov. 8
Nov. 19.	Bulkhead—Boston, Mass.	Nov. 8
Nov. 20.	Bridge—Washington, D. C.	Nov. 1
Nov. 20.	Post Office—Caribou, Me.	Oct. 18
Nov. 22.	Post Office—Basin, Wyo.	Oct. 25
Nov. 23.	Post Office — Woodbury, N. J.	Oct. 25
Nov. 26.	Dry Dock Crane, Wash., D. C.	Oct. 25
Nov. 26.	Steel Towers—Washington, D. C.	Nov. 1
Nov. 26.	Electric Duct System — Charleston, W. Va.	Nov. 8
Nov. 26.	Radio Building—New Orleans, La.	Nov. 8
Nov. 26.	Reservoir — Philadelphia, Pa.	Nov. 8
Nov. 26.	Electric Generating System, Ft. Stanton, N. M. Adv. Nov. 8.	Nov. 8
Nov. 27.	Post Office—Chapel Hill, N. C.	Oct. 25
Nov. 27.	Stone—New Orleans, La. Adv. Nov. 1 and 8.	Nov. 1
Nov. 28.	Post Office — Bellefourche, S. D.	Oct. 11
Nov. 30.	Post Office—Buffalo, Wyo. Adv. Nov. 1.	Nov. 1
Nov. 30.	Machinery, etc. — Cincinnati, O. Adv. Nov. 1 and 8.	Nov. 1
Dec. 5.	Post Office—Decatur, Ala.	Nov. 1
Dec. 5.	Bulkhead — New Orleans, La.	Nov. 8
Dec. 10.	Foam Fire Protection — Guantanoma, Cuba	Nov. 8
Dec. 17.	Post Office—Denton, Tex.	Nov. 8
Dec. 18.	Laterals — Torrington, Wyo.	Nov. 1

MISCELLANEOUS

Bids Close		See Eng. News-Record
Nov. 10.	Roof Repairs — Elmira, N. Y. Adv. Nov. 8.	Nov. 8
Nov. 13.	Channel Improvements — Columbus, O. Adv. Oct. 25.	Oct. 25
Nov. 15.	Pumping Machinery — Brockton, Mass. Adv. Oct. 25 to Nov. 8.	Oct. 25
Nov. 15.	Flood Control—Dayton, O. Adv. Sept. 13 to Oct. 18.	Sept. 13

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

Wis., Hartford—City plans to issue $15,000 bonds to build water-works.

Wis., Tomahawk—City having plans prepared by R. W. Richardson, engr., 476 Laurel Ave., St. Paul. Minn., for improvements to water-works system, including 20 x 25-ft. pumping station and electrically driven centrifugal pump, 300 gal. per minute capacity. About $20,000. Noted Oct. 11.

Kan., El Dorado—City sold $60,000 bonds to build water-works system. W. H. Betz. supt.

Kan., Winfield—City to issue $129,000 bonds to build new water-works system. J. M. Bradley, city engr.

S. D., Alpena—City plans bond issue to build water-works system.

S. D., Mitchell—(Official)—City defeated $125,000 bonds to improve water-works. Noted Oct. 25.

Mo., Kansas City—City plans to issue $50,000 bonds to build pumping station in East Bottoms. C. Hill, city engr.

Water-Works (Continued)

Tex., Goose Creek—N. L. Nelson, Sour Lake, plans to build water-works system and electric-light plant here.

Okla., Ardmore—City plans to improve water-works system. About $250,000. J. H. Curlock, city engr.

Okla., Henryetta—City defeated $128,000 bonds to build water-works. Noted Oct. 11.

Okla., Okmulgee — City voted $385,000 bonds to improve water-works, including new reservoir, pumping station, etc. Noted Oct. 25.

Colo., Windsor—City having plans prepared for water-works. E. B. House, engr.

Utah, Brigham—City voted $80,000 bonds to rebuild water-works system including new reservoir. F. Y. Jensen, supt. Noted Oct. 4.

Utah, Moab—Town plans to issue $45,500 bonds to build water-works.

Ont., Sault St. Marie—City plans to improve water-works. About $25,000. Van Every, mgr.

Ont., Strathroy—Town soon lets contract pump house and turbine pump for reservoir. About $10,000. Kerry & Chase, Confederation Bldg., Toronto, engrs.

BIDS DESIRED

Miss., Charleston—Until Nov. 20, by J. M. O'Neal, comr. water and light, improving water-works and electric-light systems; including oil engines, pumps, deep well, reservoir, elevated tank, and oil storage facilities. X. A. Kramer, Magnolia, engr. Noted Oct. 11.

O., Euclid—(Official)—Until Nov. 26, by H. S. Dunlop, village clk., building 6 in. water mains in Independence Ave. from St. Clair Ave. to Babbitt Rd.; Chelsea Ave. from St. Clair Ave. to Babbitt Rd.; Naumann Ave. from Gardner to Cut Rd.; Ivan Ave. from Bliss Rd. to Ivan Ave., Nicholas Ave. from Bliss Rd. to Nicholas Ave. F. A. Pease, Marshall Bldg., Cleveland, village engr.

O., Wooster—(Official)—Until Nov. 19. by R. Bruno, city clk. for improving water-works. O. A. Gierow, city engr. Noted Sept. 27.

Ia., Sioux City—(Official)—Until Nov. 10, by City, building North Riverside sewerage system, including pumping station and outfall beds. C. Kloster, clk. T. H. Johnson, city engr.

Man., Winnipeg — (Official) — Until Nov. 10, by Greater Winnipeg Water Dist., supplying portland cement for year 1918. R. D. Wauch, chn. Advertised in this issue.

Man., Winnipeg—By Greater Winnipeg Water Dist. improving water-works as follows:

Nov. 16, gate house and intake at Shoal Lake.

Nov. 26, c.i. gate valves and sluice gates.

Dec. 3, material to be used in pipe line from Red River to McPhillips St. reservoir; also for building pipe line. W. G Chace, ch. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Pa., Phila.—City received lowest bid laying water pipes in Parkway between 22nd and 25th Sts., from E. C. Fish Co., Real Estate Trust Bldg., $36,385.

★Pa., Phila.—(Official)—Springfield Consolidated Water Co. let contract 4,000,000-gal. cross-compound Corliss pumping engine at Pickering Creek Sta., to Allis-Chalmers Mfg. Co., Pennsylvania Bldg.

O., Akron—(Official)—City received low bids Contr. No. 89, laying c.-i. water pipe, from E. & W. McShaffrey, 173 South Forge St., $15,388; T. E. McSchaffrey, 130 South College St., $18,165; Peters-Carpenter Handy Co., Akron, $18,273. Noted Oct. 4.

★Ill., Berwyn—City let contract for water-works improvements in Lawndale Manor to J. W. Harker, 531 North 5th Ave.; Clinton, Harvey and Wenonah Aves., to F. Trinner, 1333 Kenilworth Ave.; Oak Park; Curtis Subdivision and Lombard Aves., to T. H. Inglehart, 209 South La Salle St., Chicago. Noted Oct. 11.

★Kan., Kansas City—City let contract water mains and valves for reservoir, to Arkansas Bridge Co., 1503 Waldheim Bldg., Kansas City, Mo. About $30,000. Noted Aug. 16.

★Kan., Towanda—City let contract for water-works to B. F. Evans, Newton. About $25,000. Noted Sept. 20.

★N. D., Dickinson—City let contract extending water-works and sewerage systems, to C. W. Schruit, Minneapolis, Minn. About $30,000.

★N. D., Langdon—(Official)—City let contract for water-works and sewerage systems, to Haggart Constr. Co., Fargo, $73,358. Noted Oct. 25.

★Tex., Electra—City let contract building reservoir about 4 mi. from here, $90,000,000 gal. capacity; concrete spillway 300 ft. long, to O'Neil Eng. Co., Praetorian Bldg., Dallas.

★Wash., Seattle—City let contract laying c.i. water mains on 10th Ave. and other streets, to Scalzo & Co., 1708 22nd St., $47,327.

★Que., Three Rivers—City let contract building pumping station and concrete reservoir to Nubert, Durge & Arsenault, Three Rivers. Noted Nov. 1.

★Ont., Hamilton—City let contract installing machinery in Beach Pumping Sta., to Turbine Equipment Co., Ltd., Canadian Pacific Ry. Bldg., steam turbine and centrifugal pumps, $75.000; Canadian Westinghouse Co., Ltd., Traders Bank Bldg., 1650 kv.-a. synchronous motor, $16,620; Canadian General Electric Co., Ltd., King and Simcoe Sts., transformers and switchboards, $19,000; Babcock & Wilcox, Ltd., Traders Bank Bldg., 1400 hp. water tube boiler and insulation, $17,555; Allen General Supplies, 205 Yonge St., Venturi meters, $3715. All contractors of Toronto. Noted Oct. 25.

SEWERS

Proposed Work

N. J., Newark—Council passed ordinance to build sewer in Oraton St. between Grafton and Verona Aves. M. R. Sherrard, city engr.

Pa., Duquesne—Council passed ordinance to build sewer in North 6th St. from West Grant Ave. to Hamilton Ave., 1st Ward. J. A. Conlin, boro. clk.

Ga., Stone Mountain—City election Dec. 5 to vote on $15,000 bond issue to build water-works system.

Fla., Perry—City plans to sell $25,000 bonds to extend sewerage system.

Tenn., Knoxville—City soon lets contract extending 3rd creek sewerage system connecting it with laterals of Dale Ave. system. About $12,000. J. B. McCalla, city engr.

Tenn., Morristown — City sold $15,000 bonds to build sewers in south side of city.

O., Akron—City plans to build sewers in Noah St. from Lawton to Maple St.; Maple St. from Noah to Doran St.; Bacon St. from Maple to Peckham St.; Doran St. from Maple to Peckham St.; Little St. from Noah to West St.; West St. from Lawton to Maple St., Garth St. from West to Grace St.; Grace St. from Diagonal Rd. to Maple St.; Adeline St. from South to Crosier St. E. A. Zeisloft, city engr.

O., Marion—City plans to build sanitary sewer in Fairground St. from State to Greenwood St. H. H. Noyes, city engr.

O., Newark—City plans to build sewer in Columbia St. between 10th and 11th Sts. C. H. Wells, city engr.

Ind., Hammond—City soon lets contract for Atchison Ave. sewer. About $105,417. P. J. Lyons, city engr.

Ind., La Fayette—(Official)—City had plans prepared for trunk line sewerage system in 7th Ward; including 7890 ft. 54-90 in. pipe. About $90,000. H. B. Overesch, city engr. Noted Oct. 18.

Mich., Saginaw—City plans to build sewers in Hiland St. from Jefferson to Macaulay Ave. and from Sheridan to Macaulay Ave., Macaulay Ave. from Weber to Hiland St. H. H. Eymer, city engr.

O., Akron—See "Streets and Roads."

Minn., Kinney—(Official)—Village defeated $20,000 bonds to build sewers. Noted Oct. 11.

Mo., St. Joseph—City plans to improve sewerage system in Hyde Park Dist.; including 3 service drains in Dist. No. 40, from 3rd St. north to Haeberle Gardens; Dist. No. 141 begining at 9th and Court Sts., west on Court to 8th St., south on 8th to new storage sewer; also sewer west to 7th St. C. P. Hoff, city engr.

Mo., Springfield—City having plans prepared extending sewers and improving septic tank. About $35,000. O. D. Chrisman, city engr.

Tex., Austin—City plans new election to vote on bond issue to build sewage disposal plant. M. C. Welborn, city engr. Noted Oct. 18.

Tex., Wolf City—City plans to improve water-works, including new pumping plant.

Okla., Guthrie—(Official) — City plans election in January to vote on bond issue to build sewerage and water-works systems. H. P. Cook, comr. pub. utilities. Noted Oct. 25.

Okla., Henryetta—City defeated $32,000 bonds to build storm water sewers. Noted Oct. 11.

Okla., Okmulgee — City voted Oct. 30, $150,000 bonds to improve sewerage system. Noted Oct. 25.

Okla., Quinton—City plans to improve sewerage system.

Idaho, Preston—City election, Nov. 19, to vote on $30,000 bond issue to build sewerage system. J. Johnson, clk.

Cal., Stockton—City having plans prepared by Haviland & Tibbitts, Alaska Commercial Bldg., San Francisco, building sewage disposal and sewage pumping plants.

Ont., St. Catherines—City plans building relief and outlet sewer on Carlton St. About $70,000. W. P. Near, city engr.

Alta., Calgary—City plans to install sewage disposal plant.

BIDS DESIRED

N. Y., New York—(Official)—Until Nov. 16, by M. E. Connolly, boro pres. (Queens Boro), building sewers in portions Pierce, Maspeth, Hayes, Roosevelt, McCormick and Oxford Aves., Dunsing and North Villa Sts., and Sycamore Pl.

N. Y., New York—(Official)—Until Nov. 14, by M. M. Marks, boro. pres., alterations to basins and building inlets in Madison Ave. from 43rd to 46th St.; also building sewer in Cedar St. from Bway. to Trinity Pl.

Pa., Pittsburgh — See "Streets and Roads."

O., Lorain—(Official)—Until Nov. 13, by Dir. Pub. Serv., building sanitary sewers in West 28th St. from Lexington to Oakdale Ave.; Oakdale Ave. from West 27th to West 28th St.; East 26th St. from Elyria to Apple Ave.; Clifton Ave. from East 35th to East 36th St. L. B. Johnston, clk. C. M. Osborn, city engr.

Mich., Highland Park—(Official)—Until Nov. 12, by H. A. Sisson, village clk., building sewers in Goodwin Ave., between Connecticut Ave. and southerly village limits; in alley between Cardoni and Russell Sts.; in Connecticut Ave. from Oakland to Russell Sts., and Russell St. from Connecticut Ave. to alley south of Greenwood Ave.

Wis., Appleton—Until Nov. 17, by E. L. Williams, city clk., building sewer in Adkins St. A. C. Remley, city engr.

Mo., Independence—Until Nov. 23, by City, building sewers in various streets, involving 1585 ft. 8 in. sewer pipe. About $16,000. J. Craig, clk. H. H. Pendleton, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—D. Mathewson, boro. pres. (Bronx Boro.), received low bids Nov. 7, building sewers in (a) Rhinelander Ave. between Hunt and Bronxdale Aves.; Muliner Ave. between Lydig and Rhinelander Aves.; Lydig Ave. between Muliner and Matthews Aves.; Matthews Ave. between Lydig Ave. and Pelham Pkway.; (b) Baisley Ave. between Eastern Blvd. and Ft. Schuyler Rd. (c) Ft. Schuyler Rd., east

Sewers (Continued)

side, between Eastern Blvd. and Puritan Ave., from Anita Constr. Co., 2975 Marion Ave., (a) $271,733; Union Paving Co., 120 Bway., (a) $226,054; A. McBride (b) $23,706; (c) $23,706; E. J. McLaughlin, 337 East 134th St., (b) $25,091; Black & Co., (b) $25,833, (c) $23,361; M. Dimena, 2336 Cambrelling Ave., (c) $37,886. Noted Oct. 25.

★N. J., Jersey City—City let contract building sewer in 3rd Ward, to Culligan & Machansky, $20,830.

Pa., Scranton — City received low bids storm sewers on West Market St., from Gibbons & Buckley, $12,101 and J. J. Manley, 325 Adams Ave., $14,094. Noted Oct. 18.

★O., Cleveland—Bd. Control let contract installing sewers in East 125th and East 128th Sts., to P. Ciraci; East 127th and East 128th Sts., to Courey Bros. & Co.; East 124th St., to N. Iafornaro. About $20,000.

★O., Lorain—(Official)—City let contract sewers in portions Allison and Park Aves., and Lake View Blvd., to T. Trifelli, 319 13th St. About $11,000. Noted Oct. 18.

★O., Maumee—See "Streets and Roads."

★Ia., Grand Mound—(Official)—Town let contract 2½ mi. sanitary sewers and sewage disposal plant, to R. C. De La Hunt, Cedar Rapids, $17,804. Noted Oct. 25.

★Ia., Sioux City—(Official)—City let contract building 2 sanitary sewers to W. B. Carter, Sioux City, 74c. and 75c. per ft. for 8-in. pipe.

Minn., St. Cloud—City received low bids for sewerage system, including 4200 lin.ft. 72-in. segment block and 4000 lin.ft. 36-in. segment block or vitr. pipe, from Paskurete & Co., 511 Lyceum Bldg., $133,217; Comstock & Hanson, Cedar Rapids, Ia., $148,011; Thill, Manning & Wheeling, La Crosse, Wis., $157,872. Noted Oct. 18.

★Minn., St. Paul—City let contract furnishing and delivering vitr. clay pipe sewer and specials for high service reservoir, involving 1650 lin.ft. 24-in. double strength vitr. clay sewer pipe and four 24-in. 45 degree double strength vitr. clay bends for material and building sewer on 6th St., to Streator Clay Mfg. Co., Streator, Ill., $1.35 per ft.

★N. D., Dickinson—See "Water-Works."

★N. D., Langdon—See "Water-Works."

★Cal., Santa Barbara—City let contract building intercepting sewerage system, to Magenovitch & Gillespie, 219 Bloom St., Los Angeles, $36,325. Noted Nov. 1.

BRIDGES

Proposed Work

W. Va., Wheeling—City (C. B. Cooke) engr. and West Virginia Traction & Electric Co. (R. D. Jennison, genl. mgr.), Wheeling, plan to build 2 rein.-con. bridges over Wheeling Creek. About $70,000.

Ill., Highland Park—City had plans prepared by C. Russell, engr., Court House, Waukegan, for rein.-con. girder bridge, 5 spans, asphalt macadam surfacing, on North Sheridan Rd. About $25,000. E. A. Warren, clk.

Minn., Grand Rapids—See "Streets and Roads."

Minn., St. Paul — See "Streets and Roads."

Mo., Kansas City—City (C. Hill, engr.), Kansas City Ry., (J. E. Gibson, genl. mgr.), 1500 Grand Ave., and other railroads at 23rd St., plan to build new rein.-con. viaduct to connect with viaduct built to State line by the Kansas side. Harrington, Howard & Ash, Orear-Leslie Bldg., Kansas City, consult. engr.

Okla., Sapulpa—See "Streets and Roads."
Okla., Woodward—See "Streets and Roads."

Wash., Spokane—Spokane Co. Comrs. plans to build new rein.-con. bridge over Spokane River next year. About $34,000.

Que., Montreal—Bd. Control plans to spend $20,000 to repair Lachapelle bridge. P. E. Mercier, city engr.

BIDS DESIRED

Pa., Phila.—See "Streets and Roads."

S. C., Charleston—(Official)—Until Nov. 19 (change of date), by Sanitary & Drainage Comn., Charleston Co., building steel drawbridge and timber approach over Dawboo River. J. W. Marvin, engr.; advertised in this issue. Noted Nov. 1.

Fla., West Palm Beach—(Official)—Until Dec. 4, by Palm Beach Co. Comrs., building 2 steel drawbridges over East Coast Canal. R. F. Goodman, co. engr.; advertised in this issue.

Mo., Bowling Green—Until Nov. 17, by Pike Co., furnishing steel for 9 bridges. About $12,000. C. H. Harris, co. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★O., Troy—Miami Co. let contract building bridge over Stillwater River, to Rochester Bridge Co., Rochester, Ind., $15,600.

★Ia., Sioux City—Sioux City Terminal Ry. let contract building superstructure bridge to Frankman Bros. Bridge & Constr. Co., 911 Metropolitan Life Bldg., Minneapolis, Minn.; substructure to E. A. Whitney, Sioux City. About $27,642.

Minn., Minneapolis—(Official)—City received lowest bid building Waddell direct lift bridge, from Hanlon & Okes, 338 Lumber Ex. Bldg., $122,130.

★Ark., Little Rock—See "Streets and Roads."

★Tex., Dallas—City let contract building Forest Ave. trestle, to Austin Bros., 18 Coombs St., $12,178. Noted July 5.

★Colo., Salida—(Official)—Comrs. Chaffee Co., Buena Vista, and State Highway Comn., Denver, let contract building rein.-con. bridge over Arkansas River, to R. P. McDonald Constr. Co., Denver, $14,700. Noted Oct. 25.

STRUCTURAL STEEL WORK

BIDS DESIRED

S. C., Charleston—See "Bridges."

Fla., West Palm Beach—See "Bridges."

Mo., Bowling Green—See "Bridges."

REINFORCED CONCRETE

Proposed Work

N. Y., Brooklyn—See "Industrial Works."

N. J., Newark—See "Industrial Works."

W. Va., Wheeling—See "Bridges."

Ill., Highland Park—See "Bridges."

Mo., Kansas City—See "Bridges."

Wash., Spokane—See "Bridges."

Cal., Sacramento—See "Industrial Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★O., Cincinnati—See "Industrial Works."

★Ia., Spirit Lake—See "Buildings."

★Colo., Salida—See Bridges."

★Wash., Seattle—See "Industrial Works."

STREETS AND ROADS

Proposed Work

Mass., Boston—City plans to build new roadway from Boylston St. and Commonwealth Ave. through the Fens; also concrete sidewalks on the Common. About $45,000. E. F. Murphy, comr. pub. wks.

N. Y., Buffalo—City Council plans to pave Wyoming Ave., Troy and Glendhu Pl., and 4th, Glenn and Georgetown Sts., asphalt on concrete foundation. G. H. Norton, city engr.

N. J., Camden—City Council plans to pave Liberty St., from 9th to 10th St., 9th St. from Kaighn to Atlantic Ave., Bradley Ave. from Kenwood to Greenwood Ave., sheet asphalt on concrete foundation. L. E. Farnham, city engr.

N. J., Haledon—Boro. Council plans to widen and improve Haledon Ave.

N. J., Jersey City—(Official)—City received no bids repaving Hopkins Ave., brick. Noted Sept. 13.

Pa., Greensburg — Westmoreland Co. plans to build concrete road from New Kensington to Leechburg with State aid. About $300,000.

N. C., Asheville—City plans to pave Cherokee and Victoria Rds., also College and West Haywood Sts. B. M. Lee, city engr.

Georgia—State Highway Comn., Atlanta, plans to improve with Federal aid Bacon and Brooks Cos.: Walton-Oconee Co. Highway; Hull-Lumpkin Highway. About $270,000.

Ga., Nashville—City election Dec. 11 to vote on $18,000 bond issue to pave streets.

Fla., Perry—City receives bids about Dec. 1 improving streets, asphalt on macadam base. About 75,000. Noted July 12.

Fla., Tallahassee—Leon Co. Comrs. rejected bids building 6 mi. Woodville Rd. New bids. B. E. Reed, co. engr. Noted Oct. 25.

Ala., Union Springs—Bullock Co. plans to build road from Union Springs to Montgomery Co. line, 8 mi. Cost, $23,733. County to pay ¼, State ¼ and Federal Government, ½ of cost.

Miss., Monticello—Lawrence Co. soon lets contract improving and graveling highways.

La., Thibodaux—Lafourche Parish, Rd., Dist. No. 3, at recent election, voted $50,000 bond issue for road improvements. Noted Sept. 27.

Ky., Louisville—Jefferson Co. plans to build Edwardsville-Georgetown Highway, 8586 ft. long About $10,975.

Ky., Owenboro—Fiscal Court Davies Co. rescinded contracts awarded Sept. 18, building Hardinsburg, Ware, Livermore, Henderson, Grave Lane, Boonsville, Curdsville, and Pleasant Valley Rds., as prices were too high. About $117,789. Work will be readvertised. Noted Oct. 4.

O., Akron—Council passed ordinance to grade, pave, build sidewalks, curbs, and sewers in Bowery St. from Thornton to South St.; East Ave., from Wooster Ave. to Maple St.; West North St. from Howard St. to Northern Ohio R.R. E. A. Zeisloft, city engr.

O., Cincinnati—Hamilton Co. had plans prepared improving Montauk Rd. Cost as follows: concrete, $84,072, asphaltic concrete, $94,101, warrenite, $98,173.

O., Columbus—City plans to issue $100,000 bonds to build streets and alleys in outlying sections of city. H. Maetzel, city engr.

O., Elyria—City sold $18,000 bonds for road work. C. M. Theobold, city engr.

O., Sidney—City sold $214,700 bonds for paving streets. T. Blake, city engr.

O., Springfield—City Council passed resolution to improve and pave portions Chestnut and Columbia Sts. M. J. Bahin, city engr.

Mich., Bessemer—Gogebic Co. plans to spend $78,000 to improve roads in 1918.

Mich., Wyandotte—City having plans prepared by M. L. Brown & Son, engrs., 819 Chamber Commerce Bldg., Detroit, building rein.-con. and cement pavements. About $150,000. C. Block, city clk.

Ill., Rockford—(Official)—Winnebago Co. voted $145,000 bond issue to build 6½ mi. permanent road from Rockford to Cherry Valley. Bids for work will be received in March. Noted Oct. 11

Wis., Lancaster—Grand Co. plans to build and improve state trunk line and county roads. About $54,000 available.

Ia., Ida Grove—City Council passed resolution to pave 30 blocks. K. C. Gaynor, Sioux City, engr.

Ia., Winterset—Madison Co. plans election, Nov. 20, to vote on $500,000 bond issue for road work.

Minn., Anoka—Anoka Co. plans to build road from city limits of Minneapolis to Elk River, about 23 mi., with State aid About $90,000.

Minn., Grand Rapids—Itasca Co. plans to spend $88,000 for road and bridge work.

Minn., Minneapolis—City plans to improve Drew Ave. from 40th to 44th St.; 51st St. from 34th to 42nd St.; 38th Ave. from 50th to 54th St.; 39th St. from 50th to 54th St.; 40th Ave. from 49th to 54th St.; 41st Ave. from 49th to 54th St.; 42nd Ave. from 49th to 54th St.; widening and opening 47th St. from Chicago to Nicollet

Streets and Roads (Continued)

Ave.; also from 28th to 46th Aves.; 34th St. from 28th to 34th St.; 31st from 25th to 31st St.; 38th Ave. from 31st to 32nd St.; 41st Ave. from Dorman Ave. to 32nd St.; 47th St. from Beard to France Ave.; 32nd Ave. S. from Hiawatha to 47th St.; 47th St. from 34th to Minnehaha Creek; Vincent Ave. from 52nd to 53rd Sts. Total cost about $40,650. F. W. Cappelin, city engr.

Minn., St. Paul—Ramsey Co. receives bids about January to grade, gravel and surface roads and build culverts. About $80.000. G. J. Ries, co. aud.

Minn., St. Paul—(Official)—City received no bids improving portions Mount Curve Blvd., Roblyn Park, alley in Block 3, Carbon St., Folsom and Como Aves. Noted Oct. 25.

Kan., Beloit—City passed resolution to pave Hersey and Lincoln Aves. and Chestnut, 3rd and Court Sts. C. R. Herrick, city clk.

Kan., Minneapolis—Ottawa Co. Comrs. plan election Dec. 4 to vote on $400,000 bond issue for road improvements and new jail.

Kan., Topeka—Shawnee Co. having plans prepared paving West 10th St. 2 mi. west from city limits, asphaltic concrete. About $32,000. Kenneth Raub, clk.

Mo., Greenfield—Dade Co. voted $28,000 bonds issue for roads in Everton Special Rd. Dist. Noted Oct. 25.

Mo., Independence—City plans paving and grading various streets; about $15,000. also grading, fencing, building walks and driveways in cemetery addition, 20,000 yd. H. H. Pendleton, city engr.

Mo., Springfield—City plans to improve Grand Ave. from Jefferson St. to Holland Ave. O. D. Christman, city engr.

Arkansas—State Highway Comn., Little Rock, had plans prepared paving road from Van Buren to Fayetteville, 58 mi., in Prairie Co.; Hazen to Watsons Bridge, 7 mi., $48,000, in Hempstead Co., 13 mi., gravel, $76,000.

Texas — Guadalupe, Gonzales, Fayette, Colorado. Austin, and Fort Bend Cos. plan election Dec. 18 to vote on $8,000,000 bond issue to build road between San Antonio and Houston, 16 ft. wide, bituminous, 230 mi. Address Co. Clk., Belleville.

Tex., Burnet—(Official)—Burnet Co. defeated $100,000 bonds to build roads in Precinct No. 4. Noted Oct. 4.

Tex., Canyon—Randell Co. Comrs. plan election, Nov. 24, to vote on $50,000 bond issue for road work.

Tex., Center—Shelby Co. voted $600,000 bond issue for road work. R. H. McCaully, clk. Noted Aug. 2.

Tex., Dallas—(Official)—Dallas Co. received no bids grading and graveling portion Rowlette Rd.; also resurfacing portion Seagoville Rd. C. E. Gross, co. aud. Noted Oct. 18.

Tex., Dallas—City rescinded contract let Sept. 14 to Bramley-Lanham Paving Co., Dallas, paving Knight St.; also rejected bids for paving Woodlawn St. from Fitzhugh to Bank St., Washington St. from Main to Worth St., and Beckley St. from 10th St. to city limits. Noted Sept. 27.

Tex., El Paso—(Official)—City voted on $100,000 bond issue to pave street intersections. B. M. Williams, city engr. Noted Oct. 18.

Tex., Madisonville—Madison Co., Precinct No. 1, plans election Nov. 19 to vote on $100,000 bonds issue to build 2 state and national highways.

Tex., Tahoka—Lynn Co. Comrs. plan election, Nov. 20, to vote on $60,000 bond issue for road work.

Tex., Texarkana—City plans paving Olive St. from 4th to 19th St. C. E. Hayden, city engr.

Tex., Vernon — Wilbarger Co. election Nov. 15 to vote on $115,000 bond issue to build roads in Dist. No. 1.

Okla., Hugo—Choctaw Co. defeated $50,000 bonds to build roads in Wilson Twp. Noted Oct. 4.

Okla., Sapulpa—Creek Co. voted $80.000 bonds to build roads and bridges. Noted Oct. 4.

Okla., Woodward—Woodward Co. election Nov. 17 to vote on $675,000 bond issue to build roads and bridges.

Idaho, Bonners Ferry—(Official)—Boundary Co. received no bids for grading and building small bridges. Work postponed until next spring. J. V. Stanley, co. clk. Noted Oct. 11.

Wash., Clarkston—City plans to pave several streets and lay sidewalks.

Wash., Seattle—City had plans prepared grading and paving Delaware Dr., and Maple Pl., cost, $25,000; 9th Ave., S., $100,000; Gilman Ave. and West 71st St., $15,000. A. H. Dimock, city engr.

Oregon—State Highway Comn., Salem, had plans prepared improving Ococho and Canyon Creek Rd., Crook Co., from proposed dam of Ococho Irrigation Dist. to Wheeler Co. line; about $40,000. Also road from Baker to Cornucopia, 70 mi.

Cal., Monrovia—City plans to pave White Oak Ave. from west city limits to Mayflower Ave.

Cal., Richmond—City having plans prepared paving streets in Canal Subdivision, concrete. H. D. Chapman, city engr.

Cal., Susanville — Lassen Co. voted to form boulevard district out of Supervisorial Dists. Nos. 1, 2 and 3, to build road to connect with Reno, Nevada. About $120,000. State to appropriate $60,000 toward cost. Noted Sept. 20.

Ont., St. Catherines—City Council plans to improve and widen Great Western St. from St. Paul St., W., to Grand Trunk Sta. About $12,500. J. A. Pay, city clk.

Man., Oakland—Council plans to build 60 mi. highway. W. T. Johnson, Wawanesa, clk.

Man., Sifton—Council plans to build 40 mi. highways. R. H. Hockin, Oak Lake, clk.

Man., Westbourne—City plans election to vote on bond issue to build 310 mi. gravel highway. P. McGregor, Gladstone, clk.

Bids Desired

N. Y., Wingdale—(Official)—Until Nov. 15, by Comn. on New Prisons, Hall of Records Bldg., Centre and Chambers Sts., New York City, grading at Wingdale Prison; advertised in this issue.

N. J., New Brunswick—Until Nov. 19, by Bd. Freeholders, Middlesex Co., paving of Sect. 1, River Rd., in Piscataway and Highland Park, 39,342 sq.yd., warrenite on macadam foundation. A. B. Fox, co. engr.

Pa., Phila.—(Official)—Until Nov. 14, by G. E. Datesman, dir. pub. serv., grading Weikal St. from Ann to Monmouth St., Janney St. from Ann to Cambria St., Monmouth St. from Tulip to Janney St., Front St. from Nicetown Lane to Wingohocking St.; also building portion of Pkway. from 17th to Race St.; dredging creek in 40th Ward, and repairing bridges. About $100,000. C. E. Albright, city engr. Noted Apr. 19.

Pa., Pittsburgh—(Official)—Until Nov. 12, by City, grading, paving and curbing Albert St. from Ruth to Westwood St.; Cresson St. from Bailey Ave. to Eureka St.; Eureka St. from Beltzhoover Ave. to Estella St.; Lafferty Ave. from Montooth to Gearing St.; Westwood St. from Albert to Walden St.; Warrington Ave. from Montooth St. to West Liberty Ave.; also Addis, Benitz, Osric, Vose and Culloden Ways; 15 in. T. C. pipe sewers on Murray Ave., and 8 in. pipe sewer on property of Pittsburgh Ry. Co. and Mango Way. R. Swan, city engr.

W. Va., Charleston—Until Nov. 24, by Kanawha Co., improving section Giles, Fayette and Kanawha Turnpikes; including 43,747 cu.yd. unclassified material, 1726 cu.yd. concrete; 16,400 lb. reinforcement; 774 ft. 12 in. and 162 ft. 18 in. culvert pipe; brick, concrete, asphaltic concrete or penetration macadam. L. C. Massey, co. clk.

Ala., Enterprise—Until Nov. 15, by W. B. Glenn, mayor, paving several streets, vitr. brick, cement-concrete, bituminous-concrete, macadam or wood block; including 12,000 sq.yd. paving and sidewalks. A. Pew, Forsyth Bldg., Atlanta, Ga., engr. Noted May 24.

Ala., Tuscumbia—Until Dec. 4, by Colbert Co., improving 7.02 mi. Jackson Highway; including 16,132 cu.yd. earth excav.; 9650 cu.yd. gravel, 2850 cu.yd. chert; 11,215 sq.yd. bituminous treatment; 44 cu.yd. concrete; 84 lin.ft. D.S. vitr. pipe.

Ky., Lebanon—Until Nov. 12, by Marion Co., building 5½ mi. inter-county road from here to Bardstown, beginning at Smocks Chapel and extending to Nelson Co. line. S. J. Spalding, co. clk.

Indiana—By Co. Comrs. building roads as follows:

Nov. 15: Madison Co., Anderson; building 16,006 ft. gravel, stone or macadam road on line between Madison and Delaware Cos. E. T. Flahavin, aud.

Nov. 17: Floyd Co., New Albany; building 8568 ft. road, Georgetown Twp. E. Dupaquier, aud.

Minn., St. Paul—(Official)—Until Nov. 12 by H. W. Austin, purch. agt., grading East and West Alley in Howard Park addition, Lake Como and Phalen Aves., from Rice St. to Western Ave.; Marion St. from Lake Como to Phalen Ave.; Cleveland Ave. from Commonwealth Ave. to Scudder St.; Scudder St. from Cleveland to Raymond Ave.; Lake Como and Phalen Ave. between Arcade and Forest Sts.; alley in Williams Rearrangement of Block 3; Hamline Ave. from Nebraska to Hoyt Aves.; May Ave. from West 7th to Alaska Sts.; also surfacing with asphalt; Wabash St. from 4th to 5th Sts. O. Claussen, city engr. Noted Oct. 18.

Arkansas—(Official)—Until Nov. 15, by State Highway Comrs., Little Rock, building 42 mi. gravel, concrete and asphalt macadam roads. Petersen & Marshall, Texarkana, engrs. Advertised in this issue.

Colorado—Until Nov. 10, by State Highway Comn., Denver, building Sec. 1 and 2 Fall River Rd. between Fall River and Hilner Pass. Larimer Co.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contract building artificial stone sidewalks upon the Strandway from Head House at Marino Park to point opposite Mosquito Fleet Yacht Club, South Boston, to J. L. Pierce, Boston, $13,668.

★Mass., Boston — (Roxbury)—(Official)—City let contract building bituminous macadam roads and retaining walls in Pontiac St. from Tremont to Hillside Sts., to J. C. Coleman & Sons Co., 1620 Tremont St., Roxbury, $19,647. Noted Oct. 25.

Rhode Island—State Bd. Pub. Rds., Providence, received low bids, Oct. 26, building section state highway in South Kingstown from Perrine & Cadarino, Boston, Mass., $62,660; J. Bristow, Narragansett Pier, $71,377. T. Murphy, Keene, N. H., $72,537. Noted Oct. 18.

★Connecticut — State Highway Comn., Hartford, let contract building portion Pond Rd., Cromwell Twp., 3900 lin.ft. 2 in. bituminous macadam, to F. Arrigoni & Bro., 605 Main St., Middletown. About $15,000. Noted Oct. 18.

★N. Y., Buffalo—Bd. Pub. Wks. let contract paving Northampton St. from Main St. to Humboldt Pway., 28 ft. wide, asphalt on concrete base, to German Rock Asphalt Co., Morgan Bldg. About $67,960.

★N. Y., Phœnix—Village let contract 1000 ft. brick paving, to A. J. Colins, Oswego, $10,433.

★Pennsylvania—(Official) — State Highway Comn., Harrisburg, let contracts building 9878 ft. vitr. block road, 16 ft. wide, Highway Route 52, Sect. 4C, Cambria Co., to E. H. Brua, Holidaysburg, $78,858; 11,070 ft. vitr. block road, Highway Route 52, Sect. 4B, through Jackson and East Taylor Twps., Cambria Co., to J. L. Elder, Center St., Ebensburg, $95,881; 6537 ft. rein.-conc. road through Upper Dublin, Upper Moreland and Abington Twps., Montgomery Co., to Ambler, Davis Co., Harrison Bldg., Phila., $44,349; 5800 ft. State-aid road in Clinton Twp., Clinton Co., to N. J. Boyer, Butler, $30,225. Noted Oct. 18.

★Md., Emmitsburg—City let contract paving several streets, to Potomac Eng. & Contr. Co., 708 Law Bldg., Baltimore. About $10,000.

★N. C., Greensboro—City let contract paving 10,000 sq.yd. on Elm St. asphalt, and 5000 sq.yd. on other streets, to R. G. Lassier & Co., Oxford, $16,800.

Streets and Roads (Continued)

★N. C., Newbern—City let contract paving Bridgeton St., brick; connecting Neuse River County bridge with improved highway through town to Vanceboro to Georgia Eng. Co., Augusta. About $12,000.

★S. C., Darlington—City let contract paving busines section, to Simons & Mayrant Co., 18 Broad St., Charleston. About $54,895. Noted May 10.

★S. C., Spartanburg—(Official) — Spartanburg Co. let contract building 12.9 mi. 20-ft. top soil on Buncombs Rd. between Woodruff and Crossanchor, to Thompson & Chandler, Burlington, N. C., $33,000. Noted Oct. 25.

★Ala., Gadsden—City let contract paving 6th St., asphaltic concrete on concrete base, to J. F. Morgan & Co., Gadsden. About $11,000. Noted Oct. 18.

★Ala., Russellville—(Official) — City let contract grade work, gravel paving and culvert work, to Mitchell Bros., Oneonta, Ala., $35,067. Noted Sept. 20.

★O., Cleveland—Bd. Control let contract paving portion Edgewater Cliff Dr., to Cleveland Trinidad Paving Co., The Arcade. About $25,400. Noted Oct. 4.

★O., Lakewood—City let contract grading and building sidewalks, to E. Cosa, 2454 Baldwin Rd., $33,000; Ohio Concrete Co., 14,716 Detroit Ave., $6060; Randall & Cooper c/o Sewer Constrs. Assn., 343 The Arcade, Cleveland, $67,000.

★O., Lisbon—(Official)—Columbiana Co. Comrs. let contract improving portion Lisbon-Bayard-Canton Pub. Rd., to Seiple & Wolf, Youngstown, $82,254. Noted Oct. 25.

★O., Maumee—Village let contract building pavements and sewers in various streets, concrete, to Warner-McKetchnie Co., Nasby Bldg., Toledo, $17,000.

★Ind., East Chicago—City let contract 6385 sq.yd. paving, to Campbell Constr. Co., Hammond, $18,123.

★Mich., Grosse Pointe—City let contract improving Wayburn Ave., to T. E. Currie, 20 McGraw Bldg., Detroit; $1.65 per sq.yd. for excavating and concrete base: $0.55 per lin.ft. concrete curb, 6 x 24 in.; $1.80 per sq.yd., brick paving.

★Ill., Berwyn—City let contract paving Harvey, Wenonah, and Wisconsin Aves., asphaltic concrete, to H. Goeliz, 810 North Blvd., Oak Park. Noted Oct. 11.

★Ill., La Salle—City let contract paving Hennepin St. from 1st to 4th St., brick, also concrete curbing, to T. W. Keys, La Salle, $12,800.

Ia., Des Moines—City received lowest bid paving Grand View Ave. from East 14th to North Union St. from Lambert Paving Co., 405 Utica St., $2.81 per sq.yd.

Ia., Sioux City—City received low bids paving 21st St., from Jackson to Jones Sts., from S. J. Krage, Sioux City, paving $1.63 yd., curbing, 39c., extra concrete, $9; J. Oversen & Co., $1.54, 40c. and $10.

★Minn., St. Paul—City rejected bids paving 9th St. between Smith and Summit Aves.; College Ave. between 6th and Summit Aves. Work will be done by force account. Noted Aug. 16.

★Ark., Conway—Faulkner Co. Comrs. let contract gravel road from here to Saltilli, to Bell Constr. Co., Dallas, Tex. About $48,000. Noted Oct. 11.

★Ark., Little Rock—Pulaski Co. Comrs. let contract building roadbed, bridges and culverts on 7 mi. road in Perkins Twp., to J. A. Gregory, Little Rock. About $15,000.

★Tex., Galveston — (Official) — City let contract furnishing mudshell for filling on beach crest between 25th and 39th Sts., and surfacing with 6-in. mainland soil, to Hanson Sons, 95c. per cu.yd. About $57,000. Noted Oct. 25.

★Tex., Paris—City let contract paving Central Plaza and 23rd Sts., to Texas Bitulithic Co., Praetorian Bldg., Dallas. About $23,004. Noted Oct. 25.

★Okla., Ardmore—Carter Co. let contract building 13 mi. road, to Larkin Constr. Co., Dallas, Tex. About $98,997.

★Okla., Bristow—City let contract paving Main, 6th and 7th Sts., vertical fiber brick, including 6 in. concrete curb, to Park-Moran Co., Okmulgee. About $30,000. Noted June 7.

★Idaho, Twin Falls—City Council let contract paving alleys in Local Impvt. Dist. No. 29, to C. H. Helmer. About $13,782. Noted Oct. 11.

★Cal., San Diego—City let contract paving several streets to T. C. Breitenstein, 485 Van Wyck St., Pasadena. About $34,497. Noted Nov. 1.

Cal., Santa Barbara—(Official)—City received lowest bid improving Salsipuedes and Carpenteria Sts., from Fairchild-Gilmore-Wilton, Pacific Electric Bldg., Los Angeles, $73,482. Noted Oct. 4.

★Cal., Santa Cruz — (Official)—Santa Cruz Co. received no bids, Oct. 23, improving 6 mi. highway between Santa Cruz and Felton. Work will be done by day labor. Noted Oct. 18.

★Cal., Santa Monica—City let contract paving Central Ave. to F. Ockert. About $30,739.

★Man., St. Francois Xavier — City let contract building highway to A. A. Balvin, $165,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Kentucky—Louisville & Nashville R.R. plans to build extension from Blackley up Rockhouse Creek, to develop coal mines, about 18 mi. W. H. Courtney, Louisville, ch. engr.

Texas—Kansas City, Mexico & Orient R.R. soon lets contract building extension from Alpine to Chihuahua, Mexico, about 135 mi. N. J. O'Brien, San Angelo, Tex., genl. mgr.

British Columbia—Kettle Valley Ry. plans to build branch line from Pendicton to Copper Mountain, about 14 mi. Cost, $1,000,000. A. McCulloch, Penticton, ch. engr.

EXCAVATION AND DREDGING

Proposed Work

Cal., Redding—Irrigation—E. G. Hopson, Portland, Ore., granted permit by State Water Comn., San Francisco, to divert water Cow Creek in Shasta Co. for irrigation purposes. Work involves canal 10 mi. long, ditch, 34,750 ft. long. About $100,000.

BIDS DESIRED

Pa., Phila.—Dredging—See "Streets and Roads."

O., Marion—Ditch—Until Dec. 6, by C. Ash, co. surv., building drainage ditch, known as Tymochtee Creek Impvt.; advertised in this issue. Noted June 21.

Wis., Somers—Drainage—Until Nov. 10, by Bd. Town Supervs., building Pike Creek D.D.; work involves 19,000 lin.ft. open ditch, 84,763 cu.yd. excav., 26,823 ft. 6-30 in. tile. J. J. Barrows, comr.

Ia., Clarion—Drainage—Until Nov. 12, by F. E. Osier, aud. Wright Co., building Franklin-Wright Joint Drain Nos. 8-159, involving 46,756 ft. 6-28 tile; Franklin-Wright Joint Drain Nos. 6-141, involving 53,985 ft. 6-30 in. tile.

Minn., Glenwood—Ditch—Until Nov. 22, by O. Irgens, aud., Pope Co., building Co. Ditch No. 15, involving 129,705 cu.yd. excav. About $14,269. Noted Sept. 13.

Mo., Memphis—Ditch—Until Nov. 22, by Wyaconda River D.D. No. 2, Scotland Co., at office of C. J. Weegner, engr., building 3.43 mi. drainage ditch, involving 156,000 cu.yd. excav.; also cleaning out ¾ mi. old ditch.

Ont., Dover Twp.—Drainage—Until Nov. 15, by W. G. McGeorge, engr., 153 Queen St., Chatham, building drainage system for township council. About $20,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Albany—Barge Canal Improvements—W. W. Wotherspoon, supt. pub. wks., Capitol, let Contract No. 179, completing canal prism excav. and incidental work at New York Central R.R. crossing near Pittsford, to I. M. Ludington Sons, Inc., Powers Bldg., Rochester, $79,712. Noted Oct. 11.

N. Y., Albany—Barge Canal Improvements—W. W. Wotherspoon, supt. pub. wks., Capitol, received low bids improving New York State canals, Contract No. 152, from F. L. Cohen, 49 Niagara St., Buffalo, $113,354, Lupfer & Remick, 592 Ellicott Sq., Buffalo, $142,278; Contract 165, Mohawk Dredge and Dock Co., Inc., Herkimer, $176,215; Contract 170, Cleveland & Sons Co., Brockport, $64,588; Woolsey Constr. Co., Davenport, Ia., $67,217; Mohawk Dredge and Dock Co., Inc., Herkimer, $74,595. Noted Oct. 11.

N. Y., New York—Drainage—Dept. of Health received low bids, Oct. 30, ditching, draining, filling and improving certain areas in salt marshlands and meadows, in Bronx and Queens Boro., from U. S. Drainage & Irrigation Co., 17 Battery Pl., (a) $20,900, (b) $3515, (c) $3515; Eaton, Brown & Simpson, Inc., 90 West St., (a) $22,050, (b) $4495, (c) $3895; Peace Bros., 20 Main St., Flushing, N. Y., (b) $5500.

★Fla., Elkton—Drainage—Elkton D.D. No. 2 let contract building 4½ mi. canal to drain 2200 acres to M. L. Grimes, Elkton.

★Minn., Mankato — (Official) — Ditch—Blue Earth Co. let contracts building Co. Ditch No. 50, to P. Paulson, Carroll, Ia., tile, $81,000; Rood Constr. Co., Grand Rapids, Wis., open work, $0.1465 per yd. Noted Oct. 4.

★Minn., Mankato — (Official) — Ditch — Blue Earth Co. let contract building Co. Ditch No. 53, to Judson Concrete Co., Judson, Minn., $14,950. Noted Oct. 18.

★Minn., Marshall—Ditch—Lyon Co. let contract tile on Judicial Ditch No. 16, to Marshall Tile and Cement Co., Marshall, $45,995.

★Ont., Toronto—Drainage—Bd. Control let contract completing Moore Park drainage system, to Godson Contr. Co., Ltd., Manning Chambers, $60,000.

INDUSTRIAL WORKS

Proposed Work

Mass., Provincetown — See "Miscellaneous."

N. Y., Brooklyn—Bemis Bros. Bag Co., 61 Bway., New York City, having plans prepared by G. W. Wadleigh, archt., 61 Bway., for 3-story, 85 x 700-ft. factory, rein.-con., on 52nd St. About $300,000.

N. Y., Brooklyn—H. Davidson, 28 Devine St., had plans prepared by M. Zipkes, archt., 405 Lexington Ave., New York City, 2-story, brick garage on Marion St. About $35,000.

N. Y., Brooklyn—North American Brewing Co., Hamburg and Greene Aves., had plans prepared by T. Engelhart, archt., 905 Bway., for 2- and 6-story, 90 x 100- and 50 x 130-ft. additions to its brewery. About $140,000.

N. Y., Brooklyn—Willoughby Garage Corp., 26 Court St., had plans prepared by Cantor & Dorfman, archts., 371 Fulton St., for 2 story, 92 x 154 ft. garage. About $100,000. J. Goodsky, pres.

N. Y., Buffalo—Transmission Ball Bearing Co., 1050 Military Rd., purchased 7 acre site here and plans new factory.

N. Y., College Point—L. M. F. Eng. Co. had plans prepared by P. M. Coco, archt., 120 West 32nd St., New York City, 1-story, 100 x 170-ft. brick factory, 4th Ave. and 10th St. About $150,000. A. Flint, genl. mgr.

N. Y., New York—Non-Column Garage Constr. Co., Edgewater, N. J., having plans prepared by M. J. Harrison, archt., World Bldg., for brick and stone garage. 143rd St. near Lenox Ave. About $25,000.

N. Y., New York—J. Ruppert, Inc., 1639 Third Ave., had plans prepared by Maynick & Franke, archts., 25 Madison Sq., 1-story, 105 x 210-ft. garage, 268-274 East 91st St. About $30,000.

N. Y., New York—M. Waldman plans to build garage at 156-158 East 105th St. About $25,000.

N. J., Newark—Wallington Leather Co., 42 Kent St., having plans prepared by F. Grad, archt., 245 Springfield Ave., for new 50 x 150 ft. rein.-con. factory; also 50 x 115 ft. addition, on Frelinghuysen Ave. About $40,000.

N. J., Yardville — Zee Zee Rubber Co., Yardville, had plans prepared by J. O. Hunt, archt., 114 North Montgomery St., Trenton, for plant including 2-story, 50 x 160-ft. brick factory for tubes, 40 x 60-ft. mill room and 2-story, 40 x 125-ft. office. About $350,000.

Pa., Bloomsburg—F. P. Edwards, 150 West Main St., soon lets contract for 2 story garage. About $25,000. W. H. Lee, Dime Trust Bldg., Shamoken, archt.

Pa., Erie—Erie Forge Co., 15th and Cascade Sts., plans plant outside of city limits. About $2,000,000.

Pa., Farrell—Carnegie Steel Co., Carnegie Bldg., Pittsburgh, will build a new bar mill here. About $1,200,000.

Pa., Nazareth—Dexter Cement Co., Nazareth, plans large addition to plant. About $300,000.

Pa., Phila.—Berman Bros., 6019 Market St., plans 112 x 120 ft. garage on Cedar Ave. and 61st St. About $25,000.

Pa., Phila.—M. T. Lucas purchased site on 46th and Chestnut Sts. and plans to build garage. About $26,000.

Md., Baltimore—Corkan & Hill Co., 27 South Howard St., having plans prepared by Gardener & Lindberg, archts., 140 South Dearborn St., Chicago, for 3-story packing and cold-storage plant. About $200,000.

Industrial Work (Continued)

Md., Baltimore—Porcelain Enamel & Mfg. Co., O'Donnell St., soon lets contract for 1 story, 120 x 229 ft. factory, Bayard and Ridgeley Sts. About $100,000.

Md., Westport—Chesapeake Iron Works, soon lets contract 1 story erecting shop at plant here. About $150,000.

W. Va., Mullens—Mullens Ice & Cold Storage Co. had plans prepared by A. F. Wysong, archt., Princeton, W. Va., for bottling and cold-storage plant. About $50,000.

N. C., Morgantown—Garron Knitting Mills recently incorporated with $150,000 capital stock, plans to build several factories here.

Tenn., Paris—Louisville & Nashville R.R. plans roundhouse, shop, etc. About $60,000. W. H. Courtenay, ch. engr.

O. Bucyrus—A. L. Holloway, local agt. for Ford Motor Car Co., purchased site at 243 East Mansfield St., and plans 2 story garage. About $30,000.

O., Cincinnati—Fox-Klein Motor Co., 123 East 7th St., having plans prepared for 3 story, 65 x 100 ft. factory. Gilbert Ave., near 8th St.

O., Cleveland — Manufacturers Oil and Grease Co., 608 Century Bldg., plans factory on Walworth Ave. About $25,000.

O., Cleveland—K. V. Painter, 6203 Euclid Ave., plans to build garage. About $40,000.

O., Cleveland—Pipe Machinery Co., 4907 Mead Ave., plans 1 story brick factory, Mead and Mumford St. About $25,000.

O., Cleveland—Simmons-Chalmers Co., 1900 East 19th St., plans to build garage and service station. About $100,000. R. C. Simmons, genl. mgr.

O., Sandusky—Lake Erie Drydock & Mill Co., recently incorporated with $1,600,000 capital stock, plans shipbuilding plant. C. Bright, 222 East 82nd St., New York City, interested.

O., Toledo—Toledo Plate & Window Glass Co., 1014 West 11th St., plans 113 x 200 ft. factory, St. Clair and Hamilton Aves. About $150,000.

Ind., Great Falls—Montana Power Co., Electric Bldg., Central Ave., plans 90 x 138 ft. substation. About $150,000.

Ind., Whiting—Great Western Smelting & Refining Co., Chicago, purchased 25-acre site at Whiting, and plans to build plant; first unit to be foundry. About $60,000.

Mich., Detroit—Essex Motor Corp., 2901 East Jefferson Ave., soon lets contract for 1-story, 100 x 500-ft. factory. About $100,000. W. J. McAneeny, pres.

Mich., Detroit—Pennsylvania Lines West of Pittsburgh having plans prepared by B. C. Somerville, engr., 802 Penobscot Bldg., for 3 story 400 x 1000 ft. freight house. Estimated cost, $1,000,000. W. Thos. Rodd, Pittsburgh, ch. engr.

Mich., Pontiac—C. R. Wilson Foundry & Machine Co. had plans prepared for factory on South Saginaw St. About $30,000. C. B. Wilson, pres. Smith, Hinchman & Grylls, 710 Washington Arcade, Detroit, archts.

Ill., Chicago—G. M. Davis Regular Co., 422 Milwaukee Ave., having plans prepared by F. D. Chase, engr., Chicago, for 1 story factory, 25th St. and Washtenaw Ave. About $75,000.

Ill., Chicago—Gutmann & Co., 14 West Austin Ave., soon let contract for 5-story, 60 x 150-ft. addition to tannery, Dominick St. and Webster Ave. E. J. Gutmann, pres. Ottenheimer, Stern & Reichert, 220 South State St., archts.

Ill., Chicago—Illinois Central R.R. purchased site between 157th and 175th Sts., and plans to build new freight house. About $1,250,000. A. S. Baldwin, ch. engr.

Ill., Cicero—Chicago, Burlington & Quincy R.R., Chicago, soon lets contract 1-story, 41 x 121-ft. machine shop at Clyde Sta. About $60,000. W. T. Krausch, Chicago, engr. of bldgs. Noted Oct. 18.

Wis., Madison — Steinle-Turret Machine Co., 2305 Waubesa St., plans 1-story, 150 x 500-ft. brick, steel and concrete gun factory.

Wis., Milwaukee—Milwaukee Corrugating Co., 36th Ave. and Burnham St., plans factory. About $100,000.

Wis., Milwaukee—Reitman-Straus Co., 412 Ry. Ex Bldg., soon lets contract 1 story, 70 x 170 ft. garage on Frederick Ave. and Folsom Pl. About $25,000 G. Klenzendorff, 1015 4th St., archt.

Wis., Milwaukee—Standard Steel Co., increased its capital stock from $30,000 to $300,000, and purchased 23 acre site at Lake St. and Hopkins Rd., on which it plans to build factory. E. J. Guenther, pres. and treas.

Wis., Sheboygan—Kiel Woodenware Co. plans addition to generating plant here. About $65,000.

Ia., Sac City—City retained G. L. Long, engr., Webster City, to supervise building of electric-light plant. About $60,000.

Kan., Rosedale—Rushton Baking Co., 914 Southwest Blvd., plans 2 story, 80 x 148 ft. bakery. About $40,000.

Neb., Omaha—Sprague Tire & Rubber Co., 1106 Woodmen of World Bldg., plans 5 story, 66 x 264 ft. factory.

Mo., Kansas City—M. Ross, 500 East Armour Blvd., having plans prepared by White & Dean, archts., 311 Bellefonte Ave., 2 story garage and machine shop, Bway. and Goodrich St. About $25,000.

Mo., St. Louis — Bulis Mfg. Co., 1122 South 12th St., purchased site on Calvary Ave., and plans addition to factory. About $100,000.

Mo., St. Louis—St. Louis Electric Wks., 4060 Forest Park, increased its capital stock from $20,000 to $100,000, and plans to enlarge and improve plant.

Tex., Temple—Gulf, Colorado & Santa Fe R.R. plans to build power house, machine shop, etc. About $150,000. F. Merritt, Galveston, ch. engr.

Okla., Fredrick—O. L. Phipps, soon lets contract 2 story garage. About $25,000. Vahlberg & Riggins, 304 Baum Bldg., Oklahoma, archts.

Cal., Alturas—Modoc County Packing Corp., had plans prepared for 3 story packing plant. About $75,000.

Cal., Los Angeles—Leach Motor Car Co., 1132 South Grand Ave., plans 3 story, 100 x 155 ft. factory, 16th and Figueroa Sts. About $150,000.

Cal., Los Angeles—United Light & Power Co., plans electric power plant on San Gabriel River. About $300,000.

Cal., Sacramento—Libby, McNeil & Libby, 31st and P Sts., had plans prepared by W. Miller, archt., 417 Market St., San Francisco, for rein.-con warehouse. About $140,000.

N. S., Dartmouth—Liquid Air Co., 1 Earnest St., Montreal, having plans prepared for acetylene plant here. About $50,000.

N. S. Halifax—Robinsons, Ltd., Queen and Doyle Sts., soon lets contract 2 story garage. About $50,000. S. P. Dumasesq, St. Paul Bldg., archt.

Ont., Toronto — Canadian Fairbanks-Morse Co., 26 Front St., W., plans addition to hydraulic plant. About $30,000.

BIDS DESIRED

N. Y., Central Islip—(Official)—Until Nov. 14, by State Hospital Comn., Capitol, Albany, building power house. E. S. Elwood, secy. Advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Me., Biddeford—Biddeford Motor Mart, 297 Main St., let contract 2-story public garage to T. R. Brennan, 63 South St., $25,000.

★Mass., Boston—(South Boston)—F. E. Atteaux, 176 Purchase St., Boston, let contract 2-story 65 x 170-ft. rein.-con. factory to Turner Constr. Co., 244 Madison Ave., New York City.

★R. I., East Providence—Gorham Mfg. Co., foot Earl St., Providence, let contract plant to J. W. Bishop Co., 109 Foster St., Worcester, Mass., $150,000.

★Conn., Stratford—Royal Equipment Co., let contract 1 story, 90 x 180 ft. factory to Bridgeport Austin Co., 1188 Main St., Bridgeport. About $50,000.

★N. Y., Brooklyn—National Lead Co., 174 Front St., let contract 4 story, 112 x 135 ft. factory, rein.-con., Jay and Front Sts., to Turner Constr. Co., 244 Madison Ave., New York City, $90,000.

★N. Y., Buffalo—Barber Asphalt Co., 178 Walden Ave., let contract building 1-story, 48 x 122-ft. shop, to C. Berricks Sons, 1151 Main St. About $24,000.

★N. Y., Fulton—Fulton Steel Corp., c/o H. W. McAlteer, Woolworth Bldg., New York City, let contract for plant to F. W. Woodcock, Fulton, $60,000.

★N. Y., Yonkers—H. Schneider Co., 150 Downing St., let contract 2 story, 30 x 152 and 50 x 86 ft. factory buildings, to J. Diehl Constr. Co., Mansion Ave. About $40,000.

★N. J., Linden—See "Buildings."

★N. J., Newark—Miner, Edgar Co., Blanchard St., let contract 4 story, 70 x 163 ft. and 1 story, 11 x 40 ft. power house and warehouse, to F. Kilgus, Inc., 13 East 6th St.

★N. J., Newark—United Color Pigment Co., 763 Broad St., let contract factory, to W. G. Sharwell Co., Cedar Ave., Montclair, $100,000.

★N. J., Perth Amboy—National-Synthetic Co., let contract 1 story factory building, to Tullis & Blanchard, 326 East 42nd St., New York City, $75,000.

★Pa., Pittsburgh—South Negley Ave. Garage & Repair Co. let contract 2 story garage, to Lytle Campbell Co., Inc., 1007 Forbes St. About $55,000.

★O., Cincinnati—Proctor & Gamble Co., Spring Grove St. and Ivorydale Ave., let contract 4-story, 60x350-ft. rein.-con. addition to factory to Ferro Concrete Constr. Co., Richmond and Harriet Sts.

★O., Cincinnati—O. Schiear Motor Car Co. let contract 2 story, 90 x 110 ft. warehouse, 9th and Sycamore Sts., to L. Eid Constr. Co., 1206 Liberty St. About $60,000. Noted Sept. 6.

★O., Cleveland—A. P. Schraner Pattern Works Co., 430 Prospect Ave., N. W., let contract, 3-story, 60 x 107-ft., on Payne Ave., N. E., to H. G. Stalmyer & Son Constr. Co., 203 Lakeside Ave., N. W. Noted Oct. 4.

★Mich., Detroit—Lincoln Motor Co., West Warren and Levermois Sts., let contract 4 story, brick and concrete factory and 1 story power plant, to Walbridge-Aldinger Co., Detroit.

★Ill., Chicago—Erman Tire & Rubber Co., 144 West 27th St., let contract 2 story addition, to J. L. Carnegie & Son, 189 West Madison St., $50,000.

★Ill., Chicago—Robb Motor Co., 2803-10 Sheffield Ave., let contract 3-story, brick, garage, to J. A. Wesche Co., 163 West Washington St., Chicago, $76,000.

★Ill., Decatur—Comet Automobile Co., Orlando Bldg., let contract 2-story assembling plant, to M. J. Hoffman Constr. Co., Rookery Garage Bldg., Evansville, Ind., about $135,000. Noted June 7.

★Ia., Sioux City—Sioux City Welding & Machine Wks. let contract welding and machine shop, to Blanchard Bldg. Co., Frances Bldg., $30,000.

★Colo., La Salle—Union Pacific R.R. let contract icing plant, to J. P. McDonald, Denver, $100,000.

★Wash., Seattle — Willys Overland Co., Central Bldg., let contract 2-story, 113 x 180-ft., rein.con. garage, salesroom and repair shop, to Warrack Constr. Co., Arcade Bldg. About $153,000.

★Cal., Oakland—Moore & Scott Iron Wks., 678 Second St., San Francisco, let contract 1 story, steel and frame machine shop, to P. J. Walker Co., Monadnock Bldg., San Francisco, $65,000.

BUILDINGS

Proposed Work

Mass., Boston—School—Bd. Educ. soon lets contract, 2-story, 80 x 150 ft. About $140,000. T. D. O'Conner, comr. J. McLaughlin, 88 Tremont St., archt.

N. Y., Brooklyn—Club House, Etc.—Queens County Jockey Club, 399 Fulton St., had plans prepared by T. Bennett, archt., 7826 5th Ave., for 3-story, 35 x 88-ft. addition to clubhouse, paddock and grandstand, Aqueduct Race Track. About $60,000.

N. Y., Elmhurst—High School—Bd. Educ. plans addition to Newtown High School on Chicago St. About $400,000. Boring & Tilton, 52 Vanderbilt St., New York City, archts.

N. Y., Greycourt—Colony—Dept. of Correction, Municipal Bldg., New York City, had plans prepared by C. B. Meyers, archt., 1 Union Sq., New York City, for women's farm colony buildings to be 4 story, 300 x 400 ft. and 10 x 200 ft. Address N. G. Lewis. About $225,000.

Buildings (Continued)

N. Y., New York—Hotel—A. G. Vanderbilt Estate, Grand Central Terminal, had plans prepared by Warren & Wetmore, archts., 15 East 47th St., for 18 story, 80 x 197 ft. addition to Hotel Vanderbilt; Hilliard Hotel Co., 502 4th Ave., lessee. G. L. Boissevain, pres.

N. Y., New York—Inn—Blue Goose Inn Operating Co., 90 West St., had plans prepared by W. G. Massarehe, archt., 15 East 40th St., for 1 story addition. About $50,000. R. Joseph, pres.

N. J., Trenton—Dormitory—State Bd. Archts. rejected bids, 3-story, at School for Deaf. Figures were in excess of appropriation. Noted Oct. 18.

Pa., Harrisburg—High School—Bd. Educ., 121 Chestnut St., soon lets contract, 3 and 4 story, 167 x 183 ft. About $200,000. A. C. Stamm, pres. C. H. Lloyd, Telegraph Bldg., archt. Noted June 7.

Pa., Phila.—High School—Bd. Educ., c/o W. Gayley, 621 Edgemont Ave., soon lets contract, 4 story, 115 x 240 ft. About $200,000. C. S. Adams, 1509 Arch St., archt.

Pa., South Bethlehem — Lodge — W. L. Ester, 805 Delaware Ave., c/o Kappa Alpha Fraternity, soon lets contract, 3-story, 28 x 106 and 14 x 33 ft. V. Van Polt, 381 4th Ave., New York City, archt.

Md., Baltimore — Theater — Homewood Amusement Co., c/o G. A. Finch, 1127 Munsey Bldg., soon lets contract, 1 story, 73 x 125 ft. About $150,000. Blake & Zink, Equitable Bldg., archts. Noted Sept. 13.

W. Va., Huntington—Bank and Office—Union Bank and Trust Co., 4th Ave. and 9th St., soon lets contract, 10-story, 40 x 90 ft. About $150,000. Bankers Eng. Co., 112 West 19th St., New York City, archt. Noted Sept. 20.

Ga., Claxton—Court House—Evans Co. election soon to vote on $50,000 bond issue for court house.

O., Columbus — Prison — State Prison Comn. having plans prepared by Richards, McCarty & Bulford, archts., Hartman Bldg. Cost between $2,500,000 and $4,000,000.

Ind., Gary—Bank, Store and Office—Union Trust & Savings Bank had plans prepared by A. H. Andrews, archt., 1100 West 22nd St., 1 and 3 story, 75 x 125 ft. About $125,000. D. F. Van Liew, cashier.

Mich., Detroit—Church, Rectory and School—St. Hyacinth's congregation, McDougall and Frederick Aves., had preliminary plans prepared by E. Brielmier & Sons Co., archts. 41 University Bldg., Milwaukee, and 19 South La Salle St., Chicago. 1 story. About $300,000. I. S. Malkiewicz, pastor.

Mich., Mt. Pleasant—School—Bd. Educ. voted $60,000 bonds to build school.

Ill., Chicago—Church—Grace Episcopal congregation soon lets contract, 105 x 172-ft., to replace one destroyed by fire few years ago. About $200,000. B. G. Goodhue, 2 West 47th St., New York City, archt. Noted July 12.

Ill., Chicago—Temple—Glennon & Kern, 626 South Kern St., c/o Chicago Northern Masonic Assn., soon lets contract for 4-story, 150 x 150 ft. About $200,000. F. Glennon, chn. bldg. com. R. M. Hyde, 234 South La Salle St., archt.

Wis., Marathon—Seminary — Capuchin Fathers plan, 2 story, 150 x 170 ft. About $200,000. H. T. Liebert, Wasau, archt.

Wis., West Allis—High School—Bd. Educ. soon lets contract. About $200,000. R. A. Messmer & Bros., Majestic Bldg., archts. Noted June 21.

Kan., Minneapolis — See "Streets and Roads."

Kan., Pittsburg—Business College—P. W. Errelo having plans prepared by Maxwell & Maxwell, archts., 505 South Bway., 3-story, brick. About $50,000.

Kan., Topeka—Church—H. Smith, Cudahy Ave., Los Angeles, Cal., c/o C. E. Bryan Syndicate plans, on Euclid Ave. About $100,000.

Kan., Wichita—Bank—Kansas City Natl. Bank having plans prepared, 15 story, 150 x 150 ft., Main and Douglas Sts. About $1,000,000. C. W. Southard, vice pres.

Neb., Gering—Court House—Scotts Bluff Co plans election soon to vote on $100,000 bond issue to build courthouse.

Okla., Bartlesville—Lodge and Office—Masonic Bodies, c/o H. Weber, M. D., having plans prepared by A. L. McGregor & W. Everman, archts., 8 story, 100 x 140 ft. About $275,000. Noted May 17.

Okla., Bryan—High School—Pawnee Co. voted $90,000 bonds to build high school here. L. B. Smith, Pawnee, co. school supt.

Okla., Norman—Dormitory and Cafeteria—University Building Co. plans. About $70,000. E. De Barr, pres.

Okla., Oklahoma—Office—Western Natl. Bank having plans prepared by Hawk & Parr, archts., 501 Security Bldg., 12 story, brick and rein.-con. About $200,000.

BIDS DESIRED

Me., Lewiston—Social—Until Nov. 14, by Bates College, 2 story, 162 x 210 ft., brick. About $100,000. Coolidge & Carlson, 89 State St., Boston, archts.

N. J., Red Bank—School—Until Nov. 13, by Bd. Educ., 2-story, on Park Pl. About $125,000. Noted Oct. 4.

W. Va., Glenville—Court House, Jail, etc. —Until Dec. 1, by Gilmer Co., 2 story, 75 x 100 ft. About $55,000. A. F. Wysong, Princeton, archt.

Ia., Pleasant Plain — Grade and High School—Until Nov. 20, by Consolidated School Dist. Reimer & Herlin, Marshalltown, archts.

Kan., Eldorado—Court House—Until Nov. 12, by Schleicher Co. Comrs. H. B. Thompson, 1203 Southwestern Life Bldg., Dallas, Tex., archt.

Okla., Sapulpa—High School—Until Nov. 12, by Bd. Educ., 3 story, brick, stone, and rein.-con. About $200,000. J. W. Young, clk. C. A. Popkin, Berryhill Bldg., archt. Noted Oct. 18.

Cal., Palo Alta—High School—Until Nov. 13 (readvertisement) by High School Trustees, to consist of 7 buildings. About $200,000. Allison & Allison, Hibernian Bldg., Los Angeles, archts. Noted July 5.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Shelton—Sanitarium—State let contract addition to tuberculosis sanitarium, to L. A. Miller, 21 Church St., Meriden, $52,000. Noted Oct. 18.

N. Y., Fredonia—Hospital—Chautauqua Co. received lowest bid for tuberculosis hospital, from Green & Wicks, 110 Franklin St., Buffalo, $153,555.

★N. Y., New York—Office and Transportation—Adams Express Co., 61 B'way., let contract 1-story, 50x150-ft. transportation building, and 2-story, 21x100-ft. office building, 216-230 West 31st St., and 225-237 West 30th St., to J. O'Dell Whitenack, 231 West 18th St., about $70,000.

★N. Y., Syracuse—Theater, Store, and Office—Keith & Albee, 1564 Bway., New York City, let contract 1 story, 72 x 120 ft. and 10 story, 118 x 147 ft., to E. K. Fenno, 204 North Beech St. About $500,000. Noted Sept. 20.

★N. J., Linden—Office, etc.—Standard Aëro Corp., Elizabeth, let contract 2 story, 60 x 140 ft. office, and 2 story, 50 x 145 ft. factory, brick and steel, to A. E. Austin & Sons, 14230 Euclid Ave., Cleveland, O., $250,000.

N. J., Trenton—Hospital—State received low bids for Criminal Insane Hospital, from W. H. Fissell & Co., Bway. and 34th St., New York City, $61,258; Matthews Constr. Co., Rosedale Rd., Princeton, $79,000. Noted Nov. 1.

★Pa., Fairview—Wards and Connecting Corridors—State Comn. for treatment for Criminal Insane let contract to Roydhouse, Arey Co., 112 North Broad St., Phila., about $80,000. Noted Sept. 20.

★Pa., Tarentum — Hospital — Allegheny Valley Hospital let contract, 2 story, to Williams & Haas, Empire Bldg., Pittsburgh, $120,000.

★Wash., D. C. — Office — A. C. Mather, 141 South 5th St., Chicago, let contract, 68 x 113 ft., on G St., to A. L. Smith, Woodward Bldg. About $250,000.

Fla., Jacksonville—School—Bd. Educ. received lowest bid brick school, 5th and Hubbard Sts., from O. P. Woodcock, 403 Main St., $79,500. Noted June 20.

★Ala., Carbon Hill—School—Bd. Educ. let contract, 3 story, concrete, tile, and brick, to Walker Bros. & Co., Fayette, $210,000.

★Tenn., Chattanooga—Chapel and Science Hall—Chattanooga University let contract, to J. O'Brien, Chattanooga. About $85,000. Noted Oct. 11.

★O., Cleveland—Church—Fourth Church Christ Scientist let contract, brick and steel, East 105th St. and Fairmount Rd., to E. S. Barlow, 25 Hunt Ave., Boston, Mass. About $200,000. Noted Nov. 1.

★O., Cleveland—Store and Office—Oak Investment Co. let contract, 6 story, East 11th St. and Walnut Ave., to Paul Bros., Citizens Bldg.

★Ind., Mishawaka—Hospital—St. Mary's Mercy Hospital let contract, 3-story, to Larsen & Danielson, 1205 Washington St., Laporte, Ind., $120,000. Noted Oct. 18.

★Ia., Mapleton—High and Grade School—Bd. Educ. let contract, 3 story, 79 x 164 ft., to C. W. Ennis, Toledo, Ia.; about $95,000. Noted July 12.

★Ia., Spirit Lake—Hotel and Administration—Knight Templars of Iowa, c/o C. Huttenlocke, pres. bldg. comn., Des Moines, let contract 3 story, 32 x 360 ft., rein.-con., to Guarantee Constr. Co., Cedar Rapids. About $125,000. Noted Sept. 20.

★Minn., Minneapolis—School—Bd. Educ. let contract 2 story addition to Corcoran School to Lawrence Constr. Co., 624 Plymouth Bldg. About $56,000. Noted June 28.

★Minn., Pipestone — High School — Bd. Educ. let contract to L. C. Jorgenson, 1072 Marshall Ave., St. Paul, $350,000. Noted June 21.

★Kan., Pittsburgh — Bank — 1st State Bank let contract to Hoggson Bros., 485 5th Ave., New York City. About $100,000.

★Kan., Smith Center—Court House—Smith Co. let contract, 2-story, 82 x 98 ft. stone and rein.-conc. to M. E. Brady, Smith Center. About $85,000. Noted Oct. 4.

★Kan., Winfield—Hotel—Winfield Hotel Co., let contract 4 story, brick, stone, and rein.-con., to H. L. Stevens Co., 900 South Michigan Ave., Chicago, $80,000.

★Neb., Omaha—Store and Hotel—Commi Realty Co., 514 Ware Blk., let contract, 10 story, 66 x 132 ft., to G. A. Thompson, Brandies Theater Bldg., $400,000.

★Colo., Pueblo—Colorado Fuel & Iron Co. let contract 2 story, 120 x 315 ft. Y. M. C. A. building, to Narble Bros., Pueblo, $200,000

★Cal., Healdsburg—High School—Bd. Educ. let contract to Anderson & Ringrose, 320 Market St., San Francisco, $68,493.

FEDERAL GOVERNMENT WORK

Proposed Work

Mass., Boston—Heating—Bureau Yards and Docks, Navy Dept., Wash., preparing plans for heating system at Commonwealth Pier, specification No. 2684.

R. I., Newport—Garage—Bureau Yards and Docks, Navy Dept., Wash., preparing plans building, at Naval Torpedo Sta.; specification No. 2688. About $10,000.

Pa., Phila.—Fitting Out Piers—Bureau Yards and Docks, Navy Dept., Wash., preparing plans 3 fitting out piers; specification No. 2692. About $505,000.

Pa., Phila.,—Heating System for Emergency Barracks—Bureau Yards and Docks, Navy Dept., Wash., preparing plans.

Pa., Phila. — Piping System — Bureau Yards and Docks, Navy Dept., Wash., preparing plans, building at Navy Yard; specification No. 2694. About $240,000.

Md., Indian Head—Dock and Railroad—Bureau Yards and Docks, Navy Dept., Wash., preparing plans; specifications No. 2687. About $92,000.

Wash., D. C.—Extension to Marine Barracks—Bureau Yards and Docks, Navy Dept., preparing plans for extension to marine barracks, at St. Juliens Creek, Va., specification No. 2686.

Wash., D. C.—Pier and Bulkhead Wall—Bureau Yards and Docks, Navy Dept., preparing plans building at Hampton Roads; specification No. 2690. About $1,631,000.

Federal Government Work (Continued)

Wash., D. C.—Temporary Buildings—Bureau Yards and Docks, Navy Dept., Wash., preparing plans 10 temporary buildings at Hingham, Mass., and Lake Denmark, N. J., specification No. 2685.

Va., Hampton—Electrical and General School—Bureau Yards and Docks, Navy Dept., Wash., preparing plans; specification No. 2693. About $360,000.

S. C., Charleston—Automatic Sprinkler System—Bureau Yards and Docks, Navy Dept., Wash., preparing plans, installing in general storehouse.

Cal., Mare Island—(Vallejo P.O.)—Extension of Building—Bureau Yards and Docks, Navy Dept., Wash., preparing plans extending building No. 122; specification No. 2689.

Ala., Andalusia—Post Office—J. A. Wetmore, superv., archt., treas. dept., Wash., rejected bids opened Oct. 23. Noted Nov. 1.

BIDS DESIRED

Mass., Boston—Bulkhead—Until Nov. 19, by Bureau Yards and Docks, Navy Dept., Wash., building timber bulkhead at Navy Yard.

Mass., Chelsea—Heating, Plumbing and Lighting Systems—Until Nov. 12, by Bureau Yards and Docks, Navy Dept., Wash., installing at emergency hospital.

Pa., Phila.—Reservoir—Until Nov. 26, by Bureau Yards and Docks, Navy Dept., Wash., for 2,000,000 gal. rein.-con. reservoir; specification No. 2654. Noted Oct. 25.

Wash., D. C.—Addition to Forge Shop—Until Nov. 12, by Bureau Yards and Docks, Navy Dept., building at Navy Yard. About $155,000. Noted Nov. 1

Wash., D. C.—Storehouse, etc.—Until Nov. 12, by Bureau Yards and Docks, Navy Dept., building general storehouse, 1 covered annex and 1 covered extension to crane runway. About $400,000. Noted Oct. 11.

W. Va., Charleston—Electric Duct System—Until Nov. 26, by Bureau Yards and Docks, Navy Dept., Wash.; specification No. 2669. About $5000. Noted Nov. 1.

Fla., Key West—Filling—Until Nov. 19, by Bureau Yards and Docks., Navy Dept., Wash. About $25,000. Noted Oct. 25.

Miss., Gulfport—Emergency Camp—Until Nov. 12, by Bureau Yards and Docks, Navy Dept., Wash.; specification No. 2616. Former contract awarded to J. Griffith & Son, 112 West Adams St., Chicago, rescinded. Noted Nov. 1.

Miss., Gulfport—Emergency Hospital—Until Nov. 12, by Bureau Yards and Docks, Navy Dept., Wash.; specification No. 2615. Former contract awarded to J. Griffith & Son, 112 West Adams St., Chicago, rescinded. Noted Nov. 1.

Miss., Vicksburg—Levee Work—Until Nov. 10, by 3rd Mississippi River Dist., P. O Box 404, Vicksburg, 410,000 cu.yd. levee work.

La., New Orleans—Bulkhead—Until Dec. 5, at U. S. Engr. Office, Custom House, for bulkhead at Southwest Pass Mississippi River; advertised in this issue.

La., New Orleans—Levee Work—Until Nov. 10, by U. S. Engr. Office, 519 Canal St., New Orleans, 1,822,000 cu.yd. earthwork, in Lower Tensas, Barataria and Pontchartrain Levee Dists.

La., New Orleans—Radio Buildings—Until Nov. 26, by Bureau Yards and Docks, Navy Dept., Wash. About $15,400. Noted Oct. 18.

Tex., Denton—Post Office—Until Dec. 17, by J. A. Wetmore, superv. archt., treas. dept., Wash.

N. M., Ft. Stanton—Electric Generating Equipment—Until Nov. 26, at office custodian, U. S. Sanitorium, Ft. Stanton, furnishing and delivering f.o.b. cars Capitan, N. M.; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Seawall—U. S. Engr. Office let contract, building at Ft. Warren, to Bay State Dredging & Contg. Co., 247 Atlantic Ave., Boston, $33,000. Noted Oct. 11.

★Mass., Hingham—Wall—Bureau Yards and Docks, Navy Dept., Wash., let contract for improvements to wall of slips at Naval Ammunition Depot, to Dewey Cement Constr. Co., 836 Hamilton St., Allentown, Pa., and H. P. Brown Co., 120 Liberty St., New York City. Noted Oct. 25.

★N. J., Perth Amboy—Ordnance Storehouses—War Dept. (I. W. Littell, brig. genl.) let contract, to Snare & Triest, Woolworth Bldg., New York City. Cost plus %; about $6,000,000.

Pa., Hollidaysburg—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids (a) limestone, (b) sandstone, from King Lumber Co., Charlottsville, Va., (a) $62,000, (b) $64,000; W. H. Fissell & Co., 1328 Bway., New York City, (a) $63,000, (b) $65,500. Noted Oct. 4.

★Pa., Phila.—Salvage Storage Building—Bureau Yards and Docks, Navy Dept., Wash., let contract, to McCloskey & Bahls, 1620 Thompson St. $4475.

★Md., Baltimore — Storehouses — War Dept. (I. W. Littell, brig. genl.) let contract building at Curtis Bay Sta., to Smith, Hauser & McIsaacs, 18 East 41st St., New York City. Cost plus % amounting to about $3,000,000.

★Wash., D. C.—Barracks—War Dept. (I W. Littell, brig. genl.) let contracts as follows:

To Sperry Eng. Co., 82 Church St., New Haven, Conn:		
Ft. H. G. Wright, N. Y.,	4 units	$87,200
Ft. Terry, New York,	5 units	$109,000
To Turner Constr. Co., 242 Madison Ave., New York City:		
Ft. Schuyler, N. Y.	1 unit	$21,800
Ft. Totten, N. Y.	4 units	$87,200
Ft. Hamilton, N. Y.	7 units	$152,600
Ft. Tilden, N. Y.	1 unit	$21,800
Ft. Wadsworth, N. Y.	7 units	$152,600
Ft. Hancock, N. Y.	12 units	$261,600
To H. H. Jackson, Chester, Pa.		
Ft. Dupont, Del.	1 unit	$21,800
To Consolidated Eng. Co., 343-59 Culvert Bldg., Baltimore, Md.:		
Ft. Howard, Md.	3 units	$65,400
To Hampton Roads Eng. & Constr. Co., Hampton, Va.:		
Ft. Monroe, Va.	4 units	$87,200
Ft. Caswell, N. C.	3 units	$65,400
To W. T. Richardson, Jacksonville, Fla.:		
Ft. Taylor, Fla.	2 units	$43,600
Ft. Dade, Fla.	2 units	$43,600
To W. E. Hampton & Co., Los Angeles Trust & Savings Bldg., Los Angeles:		
Ft. Rosecrans, Cal.	5 units	$109,000
Ft. McArthur, Cal.	9 units	$196,200
To Dinwiddie Constr. Co., Yeon Bldg., Portland, Ore.:		
Ft. Winfield Scott, Cal.	9 units	$196,200
Ft. Stevens, Oregon	3 units	$65,400
Ft. Columbia, Wash.	2 units	$43,600
Ft. Canby, Wash.	2 units	$43,600
To Sound Constr. & Eng. Co., 72 Union St., Seattle, Wash.:		
Ft. Worden, Wash.	5 units	$109,000
Ft. Casey, Wash.	5 units	$109,000
Ft. Flagler, Wash	5 units	$109,000

Each of these units is estimated to take care of 109 men. Cost of quarters estimated at rate of $200 per man.

★Wash., D. C.—School—District Comrs. let contract building addition to Petworth School, to Melton Constr. Co., Real Estate Trust Bldg., $158,700.

Va., Farmville—Post Office—J. A. Wetmore, superv., archt., treas. dept., Wash., received low bids, from R. K. Stewart, South Boston, Va., $46,400; W. J. Brent, 506 Bd. Trade Bldg., Norfolk, $46,999; E. G. Heflin, Fredericksburg, $47,600. Noted Sept. 27.

Va., Norfolk — Romodeling Quarters — Bureau Yards and Docks, Navy Dept., Wash., received low bids, Oct. 29, remodeling quarters H, Marine Barracks, Navy Yard from Nicholas & Lindemann, 523 Seaboard Bank Bldg., $23,990, time 135 days; Nash & Jones, Law Bldg., $27,781, no time stated; W. W. Keenan, Charlottesville, $28,440, 90 days.

★Va., Norfolk—Warhouses—War Dept. (I. W. Littell, brig genl.) let contract building, at Pigs Point Sta., to J. Stewart & Co., 30 Church St., New York City. Cost plus % amounting to about $700,000.

★W. Va., Charleston—Fence—Bureau Yards and Docks, Navy Dept., Wash., let contract building at U. S. Armor plant, to W. A. Snow, 32 Portland St., Boston, Mass., $12,544. Noted Oct. 18.

★S. C., Charleston—Alteration to Immigration Building—Bureau Yards and Docks, Navy Dept., Wash., let contract, to Charleston Eng. & Constr. Co., 58 Broad St., Charleston, cost plus 10%.

★S. C., Paris Island—Temporary Hospitals—Bureau Yards and Docks, Navy Dept., Wash., let contract, to W. J. Hadlow, Jacksonville, Fla., $53,690.

Fla., Key West—Tank and Tower—Comr. Fisheries, Dept., of Commerce, Wash., D. C., received only bid building concrete tower and tank at Biological Sta., from Williams-Gerstle Engr. Co., 198 Bway, New York City, $5828, time 120 days. Noted Oct. 11.

★Fla., Pensacola—Bulkhead Piers and Repairs to Hangars—Bureau Yards and Docks, Navy Dept., Wash., let contract, to C. H. Turner & Co., 30 East Garden St.; $34,919.

★La., New Orleans—Levee Work—U. S. Engr. Office, Queen and Crescent Bldg., New Orleans, let contracts building 4,343,000 cu.yd. earthwork, Lower Tensas, Atchafalaya, Lafourche, Barataria, Pontchartrain and Lake Borgne Dists., to Dameron White Co., Baton Rouge, $12,600; Helgason Bros., $94,775; Grasser Contr. Co., Hennen Bldg., $104,490; D. B. Hearin & Son, and O. O. Ogden, Baton Rouge, $86,710; L. F. Alexander, Audubon Bldg., $58,693. Noted Sept. 27.

O., Kenton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received only bid, from Schmidt Bros. Constr. Co., Chicago, $73,860, limestone, $75,860, sandstone. Noted Sept. 27.

★Ind., Indianapolis—Aviation Camp—War Dept. let contract, to Bedford Stone & Eng. Co., Indianapolis, cost plus percentage. Cost between $200,000 and $800,000.

Ind., Valparaiso—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, from J. H. Wiese, 1301 City Natl. Bank Bldg., Omaha, Neb., $70,785; C. Weitz & Son, 713 Mulberry St., Des Moines, Ia., $73,000; Schmidt Bros. Constr. Co., 105 North Clark St., Chicago, $77,450. Noted Oct. 4.

Cal., Mare Island—(Vallejo P. O.)—Refrigerating Plant—Bureau Yards and Docks, Navy Dept., Wash., received low bids, building at Navy Yard, from Cyclops Iron Wks., 837 Folsom St., San Francisco, $23,269, alternate, $21,589, time for both 90 days; Vulcan Iron Wks., 1849 Kearney St., San Francisco, $23,850 and $21,550, 90 days; York-California Constr. Co., 832 Folsom St., San Francisco, $25,570 and $25,046, 90 days.

MISCELLANEOUS

Proposed Work

Pier, Bulk Head, etc.—Provincetown, Mass.—Provincetown Cold Storage Co. having plans prepared by F. E. Huhn, archt., for rein.-con., brick and steel pier, bulk head, sea wall, cold-storage plant and warehouse. About $150,000.

Elevated Railway—Phila., Pa.—(Official)—W. S. Twining, dir., Dept. of City Transit, 754 Bourse Bldg., rejected bids on Contract No. 525, steel and frame work and railings, concrete, floors and parapets, side enclosures, roofs, drain gutters and spouts for 4 station platforms and connecting passages or foot bridges between station platforms and station buildings at Orthodox-Margaret Sts. and Ruan-Church Sts. Work will be readvertised. Noted Oct. 18.

Contract Work—McKenzie, Tenn.—Johnson-Porter Clay Co., McKenzie, wish to contract the removal of sand and clay overburden necessary to be removed in open-pit mining of pottery clays; advertised in this issue.

Wharf—St. John, N. B.—Council plans to repair wharf and build shed. About $20,000.

BIDS DESIRED

Bulkheads—Boston, Mass.—Until Nov. 9, by Park & Recreation Dept., 33 Beacon St., grading and building bulkheads on Tenean Beach, Ward 20. J. H. Dillon, chn.

Roof Repairs—Elmira, N. Y.—(Official)—Until Nov. 10, by H. Melville, pres. bd. mgr. of reformatories, Eastern New York Reformatory, Napanoch, repairing roof of superintendent's residence; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Incinerator—Long Island City, N. Y.—M. E. Connolly, boro. pres., let contract for building and runaway, furnaces, appurtenances, chimneys, etc., of Ravenswood Destructor, 1st Ward, to Kelly & Kelly, 12th St., $173,800. Noted July 19.

Miscellaneous (Continued)

Wall—New York, N. Y.—Dir. Bellevue Hospital received low bids for excav., removals, alterations and replacement north wall of tunnel, front of laundry and power house, south side East 29th St., from Natl. Excav. & Foundation Co., 103 Park Ave., $11,600; Del Balso & Balbo, 261 Bway., $12,090; T. Gallagher, Inc., $12,590.

★**Coke Storage Bin—Rochester, N. Y.**—(Official)—Rochester Railway and Light Co., 34 Clinton St., let contract, rein.-con., to Turner Constr. Co., 242 Madison Ave., New York City, $70,000.

★**Crane Run-Way—Phila., Pa.**—Tacony Ordnance Corp., Bleigh and Milnor Sts., let contract to F. W. Mark Constr. Co., Finance Bldg., $10,700.

★**Elevated Railway—Phila., Pa.**—(Official)—W. S. Twining, dir., Dept., of City Transit, let Contract No. 533, station buildings at 4604 Frankford and 4679-4681 Frankford Ave.; Contract No. 534, buildings at 4270-4272 Frankford Ave., and 4269-4271 Frankford Ave., to Standard Constr. Co., 16th and Spruce St., $95,450. Noted Oct. 18.

★**Dam—Anahuac, Tex.**—(Official)—Trinity River Irrigation Dist. let contract building dam between Turtle Bay and Trinity Bay; also dredging channel from locks, to F. W. Lotz, Anahuac, $35,500. Noted Oct. 11.

HIGHWAY FROM LAKES TO GULF IS PROPOSED

Humboldt and a number of other towns located on the Central West Tennessee National Highway have been notified that they have been designated as a part of one of the great north and south highways, known as the Meridian Highway, and promoted by an Illinois good roads corporation, which will run from Lake Superior to Mobile. This highway has already been designated and marked from Lake Superior as far south as Pana, Ill., and the marking will be continued as rapidly as possible until completed.

Malcolm MacKinnon of Chicago, who is secretary of the Meridian Highway Association, also manager of the Chicago division of the Touring Club of America, has given out the following interview relative to this great highway:

"Completion of the marking of the Meridian Highway from Lake Superior to the gulf has been arranged at a meeting of the association at Decatur, Ill., Thursday, Oct. 25. The logic behind this movement for a direct road connecting the resorts of Wisconsin and Northern Michigan with those of the gulf coast country in Alabama, Mississippi and Louisiana is appealing more and more to the people along the line. The plan provides also a direct road for travel between intermediate points.

Under the provisions of the new trunk line road law in Wisconsin and the $60,000,000 bond issue bills in Illinois, the prospect of a broad, permanent pavement in those states within a few years looks very bright indeed.

"Kentucky and Tennessee parts of the road are to be cared for with federal aid inasmuch as the state and government money has already been ordered placed in the roads south from Cairo to Corinth, Miss., by way of Fulton, Martin, Sharon, Greenfield, Trenton, Humboldt, Jackson, Henderson and Shiloh Park. This means a broad pavement across these states also.

"Mississippi is already far advanced in wonderful development in a permanent manner of the Meridian Highway from Corinth to the gulf by way of Booneville, Tupelo, Aberdeen, Meridian, Laurel, Hattiesburg and Gulfport, and a line to Mobile from Meridian by way of Citronelle, Ala., has been designated for federal aid.

"This will be the greatest north and south national highway because it will serve the most people and because it connects the two most important touring regions in the great middle part of the United States. It bisects all east and west continental roads such as the Dixie Overland at Meridian; Bankhead at Corinth; the Old National Trail at Vandalia; the Ocean to Ocean at Decatur; the Corn Belt at El Paso, the Illinois Valley Way at La Salle, the Cannon Ball and Choctaw roads at Mendota; the Lincoln Highway at Rochelle; the Grant Highway at Rockford; the National Parks and Lake to River Highways at Madison and the Yellow Stone Trail at Stevens Point.

Notable trail movements like those named are the livest things in road angitation in all the states, and these routes, now being laid out and marked, wili be the great arteries of travel in the future. There are numerous local market roads which have more or less reason for being, but these big highways stand out as something different and as having a much greater significance.

SEWERS, DETROIT, MICH.

Bids were received by City, Oct. 18, for constructing brick sewer on Linwood Ave., from (A) Jaynes & Affeld, 1208 Ford Bldg.; (B) Julius Porath, 34 McGraw Bldg.; (C) Carpenter Constr. Co., 707 Ford Bldg., all of Detroit. The first totals represent the contractors estimate and the second the contractors' unit bids applied to the correct quantities. The unit bids were as follows:

Size		A		B		C	
Ft.	In.	Estimated Quantity	Unit Bid	Estimated Quantity	Unit Bid	Estimated Quantity	Unit Bid
14	0	1,795½	$87.00	1,796	$94.35	1,795.6	$100.00
11	0	29½	55.00	29	85.00	29.6	60.00
10	0	642½	50.00	642	46.40	642.5	60.00
9	9	2,201	46.00	2,201	46.40	2,201.0	55.00
9	6	626	45.50	626	42.30	626.0	45.00
9	3	1,750	44.40	1,750	41.50	1,750.0	40.00
9	0	1,788	43.36	1,788	41.00	1,788.0	40.00
7	6	2,209	35.40	2,209	36.90	2,209.0	30.00
7	0	1,637	23.00	1,637	29.40	1,637.0	28.00
6	6	83	21.60	83	28.00	83.0	25.00
5	3	887	18.00	760	18.60	887.0	20.00
5	0	1,841	17.28	1,788	18.30	1,807.0*	17.00
3	9	18	15.00	18	16.00	......*	......
3	6	80	12.50	56	15.00	56.0*	12.00
2	9	28	10.40	28	15.00	28.0	10.00
5	3	......	......	127	25.00	......	......
5	0	......	......	53	18.00	......	......
3	6	......	......	24	16.00	......	......
Manholes		17	175.00	17	300.00	17.0	500.00
Extended totals,		$644,870		$666,227		$682,723	

* Indicate shortages. 34 ft.-5 ft. 18 ft.-3 ft. 9 in. 24 ft.-3 ft. 6 in.

Size		A		B		C	
14	0	1,795.6	$87.00	......	$94.35	......	$100.00
11	0	29.6	55.00	......	85.00	......	60.00
10	0	642.5	50.00	......	46.40	......	60.00
9	9	2,201.0	46.00	......	46.40	......	55.00
9	6	626.0	45.50	......	42.30	......	45.00
9	3	1,750.0	44.40	......	41.50	......	40.00
9	0	1,788.0	43.36	......	41.00	......	40.00
7	6	2,209.0	35.40	......	36.90	......	30.00
7	0	1,637.0	23.00	......	29.40	......	28.00
6	6	83.0	21.60	......	28.00	......	25.00
5	3	887	18.00	760	18.60	......	20.00
5	0	1,841	17.28	1,788	18.30	......	17.00
3	9	18	15.00	......	16.00	......	......
3	6	80.0	12.50	56	15.00	......	12.00
2	9	28.0	10.40	......	15.00	......	10.00
5	3	......	......	127	25.00	......	......
5	0	......	......	53	18.00	......	......
3	6	......	......	24	16.00	......	......
Manholes		17	175.00	......	300.00	......	500.00
Extended totals,		$644,884		$666,263		$683,589	

PAVING AND SEWERS—LOS ANGELES, CAL.

Bids were received by City for grading and constructing bitulithic pavements, storm drains and sewers on various streets, from (A) G. H. Oswald, O. T. Johnson Bldg., (B) Fairchild-Gilmore-Wilton Co. acific Electric Bldg., both of Los Angeles. The unit bids were as follows:

	A	B
634,649.23 sq.ft. grading to subgrade	$0.07½	$0.09
8,144.75 sq.ft. grading to subgrade	.01½	.121
24,466.85 sq.ft. grading to finished surface in Lake St	.08	.04
17,943.28 sq.ft. grading to finished surface in Rockwood St	.10	.07
26,729.89 sq.ft. grading to finished surface in all other streets to be improved	.01½	.02
1,997.90 sq.ft. grading to finished surface first alley W. of Witmer St	.08	.077
634,649.23 sq.ft. bitulithic paving	.16	.16
849.00 sq.ft. asphalt paving, including grading-x sec. 101	.17	.20
2,126.00 sq.ft. asphalt paving, including grading—special x sec.	.17	.20
8,144.75 sq.ft. concrete paving	.15	.15
69,140.02 sq.ft. cultivating, tamp. and oil	.03½	.03
24,139.42 lin.ft. cement curb "A" steel angles at returns	.40	.37
118,938.87 sq.ft. cement sidewalk	.12½	.12½
18,988.60 sq.ft. vitrified brick gutter	.40	.35
8,348.23 sq.ft. concrete gutter	.17	.20
Storm sewer and appurtenances in 1st St. from Witmer St. to Lake Shore Ave.	1,132.49	1,065.00
Storm sewer and appurtenances in Belmont Ave., 1st St. and Catalina Ave. from Rockwood St. to 2nd St	2,394.75	2,593.00
Storm sewer and appurtenances in 2nd St. from Union Ave. to Catalina Ave	638.48	887.00
Storm sewer and appurtenances in 1st St. from Westlake Ave. to Alvarado	1,828.39	1,721.00
Storm sewer and appurtenances in 1st St. from Reno St. to Occidental Blvd.	723.09	754.00
Storm sewer and appurtenances in 1st St. from Vendome to Dillon Sts.	709.10	695.00
Storm sewer and appurtenances in 1st St. from Commonwealth Ave. to 464.32 ft. W. of Virgil	1,314.80	1,772.00
Storm drain and appurtenances in Loma Dr. from 328.5 ft. to 236.5 ft. south of 1st St	190.90	177.00
Storm drain and appurtenances in Lake St. from 12.6 ft. N. to 26.5 ft. S. of Dartmouth St	181.75	202.00
26 catch basins, 2 junction chambers and 2 manholes and connection drains in 1st and other streets	1,608.00	2,224.00
Sanitary sewer, house connections and appurtenances in 1st St. between Loma Dr. and Colina Ave	298.88	497.00
Sanitary sewer and structures in 1st St. between Witmer St. and Loma Dr. and between Colina Ave. and Union Ave.; also in Loma Dr., Belmont Ave. and Rockwood St., including shallow flushtank and reconstruction of a manhole (house connection sewers not included)	6,397.00	6,397.00
Extended totals	$213,992	$222,622

ROAD IMPROVEMENT THROUGHOUT COUNTRY IN 1917

The millions that the Government, the states and other agencies have spent this year in good roads have not been spent in vain. Crews of fleets testing tires for the B. F. Goodrich Rubber Co. of Akron, returning from every part of the country after nine months of steady touring in which they made aproximately 5,000,000 mi.—the equivalent of girdling the globe 200 times—report that there isn't a nook or cranny today that is not accessible to the motorist, owing to the volume of road improvement. Even the desert no longer holds terrors for the automobilist with nomadic tendencies. In fact, the glistening trails across the Great American and Mojave deserts testify to greater tourist travel, perhaps, than any other two roads in the country.

Condensed, these are the principal observations of the tire testing fleets:

The Pacific Coast has the finest roads in the country, and in consequence the motorists there get more tire mileage and use less gasoline per mile than in any other region of the country.

Eastern highways are groaning under the weight of motor trucks engaged in haulage—an industry sprung into being since railroad freight congestion made the use of other conveyances imperative. Particularly is this noted between Boston and New York.

Prosperity in the farming states of the West has never been greater. There are not many farmers in the six big farming states who do not possess automobiles. All the field work is done by tractors—the horses are used in the making of new roads for the automobilist.

The 2200-mi. run from Chicago to Los Angeles is the finest pleasure run in the country. Gasoline can be had every 50 mi., and there is only one tough spot in the entire route—a 40-mi. stretch near Askfork, Ariz.

Maine is the most backward in road betterment. Along the seacost the roads are good, but in the interior one is apt to encounter much trouble.

The best single stretch of road is on the new ridge highway, built by the great oil interests for travel between Los Angeles and Bakersfield, Calif. Millions were expended in constructing this great thoroughfare.

Transcontinental travel has been greater than in any previous year, the war notwithstanding.

Stones are the worst enemies of the motorist. They bruise the fabric and deteriorate starts at once, although a "blowout" may not occur for 500 mi. afterwards.

The shallow streams crossing the Dixie highway should be bridged. The sharp pebbly bottoms cut the tread and make possible punctures. Aside from these disadvantages, found more in Georgia than in any of the other states, the highway is much improved.

The Lincoln highway between Philadelphia and New York is showing the effects of heavy traffic, it being necessary now to negotiate 7 mi. of this short run in low gear.

"On the whole there are few bad roads in the country today," said one of these bronze visaged pilots. The war has not, contrary to expectations, lessened the volume of road building and improvement. States have been aroused to the necessity of keeping up their roads, because the better roads the greater the volume of business. There are at least 3,655,000 automobiles in this country today and every owner spends money. He will follow good roads. The more attractive the roads, the more picturesque the surroundings the greater the community's prosperity, hence the general alertness on the part of local governments.

"It doesn't take much to make a good road. Of course, asphalt, concrete, macadam and brick make the best roads but any road is a good road that does not have loose stones in the autoist's path. Stones, we have found, do more damage to the motorist's car than any other obstacle he will encounter. They bruise tires, destroy wheel alignment and break springs."

The West is striving to maintain its supremacy in good roads, the test tire men find, by a big campaign in 1918; North and South Dakota are getting busy and Georgia is making plans that should please the Southern tourist.

PIER, NEW YORK, N. Y.

Bids were received by W. W. Wotherspoon, supt. pub. wks., Capitol, Albany, Oct. 23, for constructing pier at foot of West 53rd St., North River, Barge Canal Contr. No. 38, from (A) I. J. Stander & Co., 118 East 28th St. (awarded contract); (B) G. P. Spearin, 90 West St.; (C) Lupfer & Remick, Ellicott Sq., Buffalo; (D) G. W. Rogers Co., 29 Bway., $299,882. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
Removing old material (lump sum)	$475 00	$400 00	$480 00
60,000 lin.ft. foundation and bracing piles	46	475	.54
1,400 lagged piles	78 00	74 47	80 00
170 fender piles	24 76	30 20	30 00
710 M. ft.b.m sawed lumber	79 20	83 16	86 00
180 M. ft.b.m. sawed lumber, treated	86 90	95 05	98 00
80,000 sq.ft. surface treatment of lumber	01¼	015	.015
524 cu.yd. 1st class reinforced concrete	14 50	14 55	11 00
1,120 cu.yd. 2nd class reinforced concrete	8 28	10 00	7 50
5,000 lb. rigid metal conduit	.215	.203	.20
37,000 lb. iron castings	.07	.081	.08
53,000 lb. metal reinforcement	.06	.079	.06
284,000 lb. structural steel	.085	.107	.088
14 spools	275 00	275 00	200 00
Extended totals	$266,065	$276,906	$278,976

PAVING—LOS ANGELES, CAL.

Bids were received by City for paving Reseda Ave. from Devonhsire St. to Ventura Blvd., from (A) Geo. H. Oswald, O. T. Johnson Bldg., (awarded contract); (B) Fred Hoffman; (C) Geo. R. Curtis, 2440 East 26th St.; (D) Johnston & Grabs, $169,504; (E) Johnson-Shea Co., Central Bank Bldg., Oakland, $169,615; (F) Rogers Bros. Co., Hibernian Bank Bldg., $201,061; (G) Tryon & Bain, 1648 West 36th, $210,949. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
740,230 sq.ft. grading to sub-grade	$0 01¼	$0 0095	$0 01
560,480 sq.ft. cultivating, tamping and rolling	.026	.02	.02
740,230 sq.ft. concrete paving with bituminous protecting coat	.17	.16	.15$\frac{9}{10}$
560,480 sq.ft. grading to sub-grade	.02	.0085	.01
Steel and concrete culverts (lump sum)	3,750 87	2,100 00	2,000 00
Extended totals	$139,662	$143,543	$143,913

OREGON AT WORK ON 38 PROJECTS

There are 38 projects now receiving the attention of the state highway commission. These projects are in 20 different counties in Oregon. They represent $2,263,115.21 and total about 190 miles of work and 10 bridges. This work has been started since June 5. The greatest activity is in Columbia, Clatsop, Douglas and Hood River.

A survey discloses the fact that the commission is working on four trunk lines, three of which cross the state. The Columbia River Highway, an east and west cross-state road; the Pacific Highway, a north and south cross-state road, and The Dalles-California highway, a cross-state road running north and south through Central Oregon are being opened, graded and macadamized. The fourth trunk line is the Tillamook Highway.

Following are the projects as listed at the office of the commission on October 1:

Clackamas County — Pacific Highway, grading near New Era, 2½ miles, $30,873.20.

Clackamas County — Pacific Highway, paving, Oregon City to Canby, eight miles, $145,721.40.

Clatsop County—Columbia River Highway, macadamizing, Svenson to Westport, approximately 15.5 miles, $111,295.

Clatsop County—Columbia River Highway, paving, Astoria to Svenson, approximately nine miles, standard bitulithic, $199,235.33.

Columbia County—Columbia River Highway, 10 bridges, $36,959.

Columbia County—Columbia River Highway, grading, Goble section, 1.8 miles, $43,300.20.

Columbia County—Columbia River Highway, grading, Rainier hill section, 2.2 miles, $11,888.50.

Columbia County—Columbia River Highway, macadamizing, 2½ miles east of Delena school house to Goble, 5.7 miles, $35,318.60.

Columbia County—Columbia River Highway, macadamizing, Clatskanie to 2½ miles east of Delena school house, $46,530.50.

Columbia County—Columbia River Highway, grading and macadamizing, from Clatsop county line to Clatskanie, 5.3 miles, $36,474.

Columbia County—Columbia River Highway, paving from Scappoose to Multnomah county line, 2.5 miles, bitulithic, $36,667.55.

Columbia County—Columbia River Highway, macadamizing, Goble section, 2.1 miles, $11,828.

Coos County — Engineering on county work, $15,000.

Deschutes County—The Dalles-California Highway, cindering, Bend 17 miles south, $17,000.

Douglas County—Myrtle creek to Dillard, grading 10.8 miles, $173,648. Bids not advertised yet.

Douglas County—Canyon Creek Pass to Johns Place, grading, approximately 2.3 miles, $23,680.60. Bids not advertised yet.

Douglas County—Pacific Highway, Yoncalla to Oakland, grading, 10.4 miles, $94,905.74.

Douglas County—Pacific Highway, Comstock to Leona; grading and macadam, 4.6 miles, $57,946.02.

Douglas County—Pacific Highway, Lane-Douglas county line to Comstock, grading and macadam, 2.4 miles, $26,787.

Gilliam County—John Day Highway, macadamizing south of Condon to Thirty-mile creek, 5.7 miles, $20,924.

Hood River County — Columbia River Highway, Cascade Locks section, grading 8.2 miles, $105,930.

Hood River County — Columbia River Highway, Viento section, grading, 3.6 miles, $71,033.

Hood River County — Columbia River Highway, Ruthton hill section, grading, 2.4 miles, $39,988.75.

Jackson County—Pacific Highway, grading Ashland hill crossing $10,000.

Josephine County — Pacific Highway, grading Wolf Creek hill, 4.9 miles, $83,606.50. Half of this should be federal aid. The project must be carried through even though the government does not help.

Josephine County — Pacific Highway, Locus Hill section, grading one mile, $4700.

Klamath County — Olene to Klamath Falls, grading and macadamizing, 10 miles, $36,000.

Lake County — The Dalles-California Highway, macadamizing Lakeview and Paisley, three miles, $15,000.

Lake County—Pacific Highway, macadamizing south county line five miles into Lane County, $5000.

Lincoln County—Pioneer mountain road, Corvallis to Newport, grading one mile, $2000.

Tillamook County — Yamhill-Nestucca road, paving starting at old paving three miles south of Tillamook City and continuing south five miles, bitulithic, $110,644.60.

Umatilla County—Columbia River Highway, paving east from Pendleton, 11 miles, bitulithic, $147,000.

Wasco County — Columbia River Highway, rocking from The Dalles, 10 miles east, $10,000.

Washington and Yamhill Counties—West Side Pacific Highway, paving from Multnomah county line to Newberg, 15.3 miles, bitulithic, $339,488.48.

Wheeler County — John Day Highway, grading Cumming's Hill section and one additional mile, 3.5 miles, $10,527.20.

Yamhill County—Yamhill-Nestucca road, paving from city limits of Sheridan east three miles, $35,660.70.

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until Nov. 15, 1917.

Asphalt Concrete Pavement

Clarksville, Tenn., Oct. 18th, 1917.

Sealed Proposals will be received by the Board of Mayor and Aldermen of the City of Clarksville, Tennessee, at the office of W. B. Young, City Recorder, until Nov. 15th, 1917, at noon, for paving parts of three streets with Asphalt Concrete, laid on a Concrete base. Approximately 15,000 sq. yds.

All bids must be made on forms of proposals furnished by the City Engineer.

All proposals submitted for the construction of this improvement shall be accompanied by a certified check or a suitable bond, with at least two good and solvent sureties, who are citizens or residents of the City of Clarksville, Tennessee; or in lieu of personal sureties, the bond of some surety company authorized to do business in the state of Tennessee may be given in a penal sum of at least ten per cent. of the entire cost of the work to be done, computed on the basis of the proposal submitted, and conditioned that the contractors named therein shall in case said work is awarded to them, enter into a contract with said city in the time required and for the price named in their respective bids, and in accordance with the plans and specifications of the City and provisions of the ordinance providing for the improvement.

The successful bidder shall execute a bond to said City in an amount equal to fifty per cent. of the entire contract price of said improvement.

The checks of the unsuccessful bidders shall be returned as soon as the contract is awarded, but the successful bidder or bidders will be retained until a bond for fifty per cent. of the amount of the contract has been executed and filed.

Plans and Specifications can be seen at the office of S. R. Alexander, City Engineer.

The right is reserved by the Board of Mayor and Aldermen to reject any or all bids.

T. H. MARABLE, M. D., Mayor.
OLIVER PICKERING,
THOMAS EDWARDS,
FRANK A. PERKINS,
JOHN S. DANIEL,
DANCEY FORT,
Special Committee.

Bids received until November 19, 1917.

Steel Draw Bridge

Charleston, S. C., Oct. 23, 1917.

Sealed proposals will be received at this office until noon November 19, 1917, for constructing steel draw bridge and timber approach across Dawhoo River, S. C. Information on application.

SANITARY AND DRAINAGE COMMISSION FOR CHARLESTON COUNTY,
JAMES W. MARTIN,
Engineer.

PROPOSALS FOR LEVEE WORK—Office of Third Mississippi River Dist., P. O. Box 494, Vicksburg, Miss—Sealed proposals will be received here until 11 o'clock a.m., Nov. 8, 1917, and than publicly opened, for constructing about $1,000,000 cubic yards of levee work. Information on application.

Official Proposals

Price, $3.60 an inch—Copy can **be** received until Wednesday, 10 a.m., for issue mailed the next day.

PROPOSALS

Bids received until November 10, 1917.

Tenders for Supply of Cement for the Year 1918

GREATER WINNIPEG WATER DISTRICT

Winnipeg, Man., Can.

Tenders upon the form adopted and supplied by the district will be received by the Corporation of the Greater Winnipeg Water District up to 12.00 o'clock noon on Saturday, the 10th day of November, A. D. 1917, for the supply of Portland Cement to the District during the year 1918 in accordance with the terms of the Information for Bidders, Form of Tender and Form of Contract, adopted by the District; all of which can be obtained on application at the offices of the District No. 501, Tribune Building, Winnipeg, Manitoba, Canada.

R. D. WAUGH,
Chairman of Commissioners.
October 23rd, 1917.
Winnipeg, Man., Canada.

Bids received until December 6, 1917.

Drainage Ditches

OFFICE OF THE COUNTY SURVEYOR
Marion, Ohio,
Nov. 1, 1917.

Sealed proposals will be received at the office of the County Surveyor at Marion, Ohio, until 12 o'clock noon, December 6, 1917, for the construction of drainage ditches known as the Tymochtee Creek Improvement.

Length—26.96 miles.

Estimated Yardage—500,779.

Estimated cost of construction — $77,741.42.

The contractor must submit a proposal and contract bond for an amount equal to 100% of the estimated cost or a certified check on any bank in the city of Marion, Ohio, for 10% of estimated cost of each section bid on.

Plans and specifications are on file at the office of the County Surveyor and can be had by writing for same.

The County Surveyor reserves the right to reject any and all bids.

LORING K. WARNER,
County Surveyor.
By CHARLES ASH,
Acting County Surveyor.

Contract Work Wanted

McKenzie, Tenn.

We wish to contract the removal of sand and clay overburden necessary to be removed in open pit mining of Pottery Clays. Overburden from 15 to 40 feet thick. Will contract for continuous movement of 1000 yards per day, or a lump contract of 300,000 yards. Address The Johnson-Porter Clay Co., McKenzie, Tenn.

PROPOSALS

Bids received until November 10, 1917.

Roof Repairs

Elmira, N. Y.

Sealed proposals for repairs to roof of Superintendent's residence, construction work, at Elmira Reformatory, Elmira, N. Y., will be received by Mr. Henry Melville, President of the Board of Managers of Reformatories at the Eastern New York Reformatory, Napanoch, N. Y., until 12 o'clock noon, Saturday, November 10th, 1917, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 2891. The right is reserved to reject any or all bids. Specifications may be consulted at the Elmira Reformatory, Elmira, N. Y., at the New York Office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y. Upon reasonable notice to and in the discretion of the State Architect, LEWIS F. PILCHER, Capitol, Albany, N. Y.

Dated, October 29, 1917.

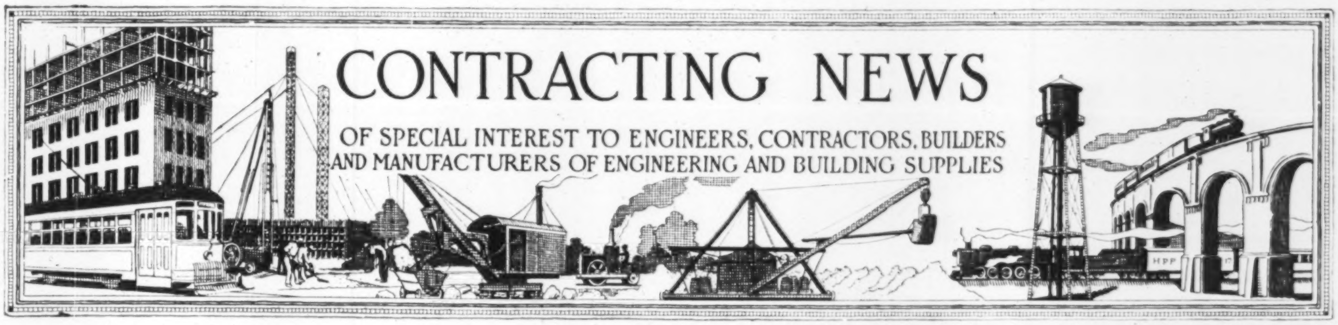
Bids received until November 15, 1917.

Construction Work

Wingdale, N. Y.

Sealed proposals for construction work—grading, at Wingdale Prison, Wingdale, N. Y., will be received by the Commission on New Prisons, Room No. 615, Hall of Records Building, Centre and Chambers Sts., New York City, until 2:30 o'clock P.M. on Thursday, November 15th, 1917, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 2816. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of the Commission on New Prisons, Room No. 615, Hall of Records, New York City, at the New York Office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architure, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposals may be obtained at the Department of Architecture, Capitol, Albany, N. Y. upon reasonable notice to and in the discretion of the State Architect, LEWIS F. PILCHER, Capitol, Albany, N. Y.

Dated, November 2, 1917.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 51 to 53 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Nov. 16.	Winnipeg, Man.	Nov. 8
Nov. 19.	Tulsa, Okla.	Nov. 15
Nov. 19.	Wooster, O.	Nov. 8
Nov. 20.	Charleston, Miss.	Nov. 8
Nov. 26.	Euclid, O.	Nov. 8
Nov. 26.	Winnipeg, Man.	Nov. 8
Nov. 26.	Winnipeg, Man.	Nov. 15
Nov. 26.	York Twp., Ont.	Nov. 15
Nov. 27.	Akron, Ohio	Nov. 15
Dec. 3.	Winnipeg, Man.	Nov. 8

SEWERS

Nov. 16.	New York, N. Y.	Nov. 8
Nov. 17.	Appleton, Wis.	Nov. 8
Nov. 19.	Brainerd, Minn.	Nov. 1
Nov. 19.	Lincoln, Neb.	Nov. 15
Nov. 23.	Independence, Mo.	Nov. 8
Nov. 26.	Oil City, Pa.	Nov. 1

BRIDGES

Nov. 17.	Charleston, S. C.	Nov. 1
Nov. 17.	Bowling Green, Mo.	Nov. 8
Nov. 19.	Bartlesville, Okla.	Nov. 15
Nov. 19.	Charleston, S. C. Adv. Nov. 8.	Nov. 8
Nov. 27.	Milford, Del.	Nov. 15
Dec. 1.	Dayton, Ohio	Nov. 15
Dec. 4.	West Palm Beach, Fla.	Nov. 8
Dec. 10.	St. Augustine, Fla.	Nov. 15

STREETS AND ROADS

Nov. 17.	Indiana	Nov. 8
Nov. 17.	Knoxville, Tenn.	Nov. 15
Nov. 19.	Seattle, Wash.	Nov. 1
Nov. 19.	Brewton, Ala.	Nov. 1
Nov. 19.	St. Paul, Minn.	Nov. 15
Nov. 20.	Holdredge, Neb.	Nov. 1
Nov. 22.	Hindman, Ky.	Oct. 25
Nov. 23.	Kendallville, Ind.	Oct. 25
Nov. 24.	Charleston, W. Va.	Nov. 8
Nov. 27.	Rogersville, Tenn.	Nov. 15
Nov. 27.	Bayonne, N. J.	Nov. 15
Dec. 1.	Columbus, Ohio	Nov. 15
Dec. 3.	Scottsboro, Ala.	Nov. 15
Dec. 4.	Tuscumbia, Ala.	Nov. 8
Dec. 4.	Columbus, Neb.	Nov. 15
Dec. 5.	Red Wing, Minn.	Nov. 15

EXCAVATION AND DREDGING

Nov. 20.	Chatham Twp., Ont.	Nov. 15
Nov. 21.	Pipestone, Minn.	Nov. 15
Nov. 21.	Anoka, Minn.	Nov. 15
Nov. 22.	Glenwood, Minn.	Nov. 8
Nov. 22.	Memphis, Mo.	Nov. 8
Nov. 24.	Buffalo, Minn.	Nov. 15
Nov. 26.	Havana, Ill.	Nov. 15
Nov. 27.	Mankato, Minn.	Nov. 15
Dec. 1.	Barstow, Tex.	Nov. 15
Dec. 4.	Salina, Kan.	Nov. 15
Dec. 6.	Marion, O. Adv. Nov. 8.	Nov. 8

BUILDINGS

Bids Close		See Eng. News-Record
Nov. 18.	Storrs (Eagleville P. O.) Conn.	Nov. 15
Nov. 19.	Johnstown, Pa.	Nov. 15
Nov. 19.	Cleveland, Ohio	Nov. 15
Nov. 19.	Hartford, Conn.	Nov. 15
Nov. 20.	Barrie, Ont.	Nov. 15
Nov. 20.	Pleasant Plain, Ia.	Nov. 8
Nov. 22.	Owensboro, Ky.	Nov. 15
Nov. 25.	Middletown, Mass.	Oct. 4
Nov. 27.	Harrisburg, Pa.	Nov. 15
Nov. 30.	Strahan, Ia.	Nov. 15
Dec. 1.	Norfolk, Va.	Sept. 13
Dec. 1.	Glenville, W. Va.	Nov. 8
Dec. 3.	Olympia, Wash.	Nov. 15

FEDERAL GOVERNMENT WORK

Nov. 19.	Fitting out Cranes—Washington, D. C.	Oct. 18
Nov. 19.	Shipbuilding Ways — Brooklyn, N. Y.	Oct. 25
Nov. 19.	Electric Elevator—Norfolk, Va.	Nov. 1
Nov. 19.	Refrigerating Plant and Brine Circulating System—Washington, D. C.	Nov. 1
Nov. 19.	Timber Bulkheads, Boston, Mass.	Nov. 1
Nov. 19.	Filling—Key West, Fla.	Nov. 8
Nov. 19.	Dredging—San Francisco, Cal.	Nov. 15
Nov. 20.	Bridge—Washington, D. C.	Nov. 1
Nov. 20.	Post Office—Caribou, Me.	Oct. 18
Nov. 22.	Post Office—Basin, Wyo.	Oct. 25
Nov. 22.	Steel Pipe—San Francisco, Cal.	Nov. 15
Nov. 23.	Changes to Custom House—Boston, Mass.	Nov. 15
Nov. 23.	Post Office — Woodbury, N. J.	Oct. 25
Nov. 26.	Dry Dock Crane, Wash., D. C.	Oct. 25
Nov. 26.	Steel Towers—Washington, D. C.	Nov. 1
Nov. 26.	Electric Duct System — Charleston, W. Va.	Nov. 8
Nov. 26.	Radio Building—New Orleans, La.	Nov. 8
Nov. 26.	Reservoir — Philadelphia, Pa.	Nov. 8
Nov. 26.	Electric Generating System, Ft. Stanton, N. M. Adv. Nov. 8.	Nov. 8
Nov. 26.	Power Plant Improvements—Charleston, S. C.	Nov. 15
Nov. 26.	Addition to Boiler Shop—Mare Island (Vallejo P. O.) Cal.	Nov. 15
Nov. 27.	Post Office—Chapel Hill, N. C.	Oct. 25
Nov. 27.	Stone—New Orleans, La. Adv. Nov. 1 and 8.	Nov. 1
Nov. 28.	Post Office — Bellefourche, S. D.	Oct. 11
Nov. 29.	Post Office—McLeansboro, Ill.	Nov. 15
Nov. 30.	Post Office—Buffalo, Wyo. Adv. Nov. 1.	Nov. 1
Nov. 30.	Machinery, etc. — Cincinnati, O. Adv. Nov. 1 and 8.	Nov. 1
Dec. 3.	Incinerator — Mare Island (Vallejo P. O.) Cal.	Nov. 15
Dec. 5.	Post Office—Decatur, Ala.	Nov. 1
Dec. 5.	Bulkhead — New Orleans, La.	Nov. 8
Dec. 10.	Foam Fire Protection — Guantanoma, Cuba	Nov. 8
Dec. 10.	Heating System — Phila., Pa.	Nov. 15
Dec. 17.	Post Office—Denton, Tex.	Nov. 8
Dec. 18.	Laterals — Torrington, Wyo.	Nov. 1

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. J., Wharton — Boro voted $110,000 bonds to build water-works. Noted Oct. 11.

Pa., Phila.—City plans to rebuild Hartwell Ave. water-pipe line feeding Mt. Airy and section Chestnut Hill. About $100,000. C. E. Davis, city engr.

N. C., Leaksville—City plans to build water-works and sewerage systems. J. N. Ambler, Durham, engr.

S. C., Columbia—City plans to install one 3,000,000 gal. and two 5,000,000 gal. electrically-driven pumps with necessary equipment at water-works. About $30,000. F. C. Wyse, city engr.

La., Bossier City—City having plans prepared by Honaker & Swope, engrs., Shreveport, for water system, including 4- and 8-in. pipe, 1 electrical and 1 oil pipe, 50,000-gal. reservoir and 1 well. About $30,000. Noted May 10.

Ky., Irvine—Estill Water & Gas Co. plans to build water-works. About $25,000. H. L. Leete, engr. and supt.

Ky., Lawrenceburg — (Official) — City voted $15,000 bonds to build filtration plant. Noted Oct. 4.

O., Hamilton—City had plans prepared by State Bd. Health, Columbus, drilling 3 new 10-in. tubular wells, 152 ft. each, and installing new piping at well basin. About $16,000. F. E. Weaver, city engr.

Ind., South Bend—City plans to install 225 000-gal. reservoir. F. J. Anderson, city engr.

Ill., Cicero—Town plans to build water-works. About $31,850. J. Monkreig, town engr.

Ill., Quincy—City plans to improve water-works, including new standpipe. About $250,000. E. R. Chatten, city engr.

Wis., Milwaukee — City plans to build water purification plant. About $30,000. G. Staal, city engr.

Wis., New Richmond—City plans to improve water-works. Address J. E. Hughes.

Ia., Keokuk—City plans to install new machinery in water-works. About $16,000.

Kan., Junction City—City plans to issue $28,940 bonds to improve water-works. T. W. Dorn, clk.

Kan., La Crosse—City voted $22,000 bonds to build water-works. Noted Sept. 27.

Kan., McCracken — City voted $12,000 bonds to build water-works. L. L. Ryan, city clk. Noted Oct. 11.

S. D., Aberdeen—City voted $125,000 bonds to improve water-works. F. Lecoq, city engr.

N. D., Belfield—City plans to build water-works. About $30,000.

Mont., Geraldine — City voted $31,500 bonds to build water-works. Noted Sept. 20.

Tex., El Paso—City voted $100,000 bonds to improve water-works. J. N. Gladding, city engr.

Okla., Hunter—(Official)—Town defeated $26,000 bonds to build water-works. Noted Oct. 4.

Okla., Ponca City—City voted $20,000 bonds to improve water-works. G. G O'Neill, supt. Noted Oct. 11.

Water-Works (Continued)

Colo., Sterling—City having plans prepared by A. A. Weiland, engr., Pueblo, improving water-works. Noted June 14.

Ore., Albany—City plans election in December to vote on $400,000 bond issue to improve water-works.

Ore., Richland—(Official) — City postponed indefinitely building water-works, owing to advance in price of materials. Noted Oct. 25.

Cal., Delano—City voted $45,000 bonds to build water-works.

Cal., El Centro — City voted $50,000 bonds to build filtration and purifying plant. Noted Sept. 27.

B. C., Delta—City plans to install electric pump and pump-house in East Delta. About $12,000. N. A. McDiarmid, city engr.

BIDS DESIRED

Okla., Tulsa—Until Nov. 19, by F. Newkirk, city aud., for 7200 ft. 24-in. c.-i. pipe. E. M. Stevens, 708 Ridge Bldg., Kansas City, Mo., engr. Noted Oct. 18.

Ont., York Township—(Official)—Until Nov. 26, by F. Barber, twp. engr., 40 Jarvis St., Toronto, trenching and laying water mains in Lauder and Glenholme Aves.

Man., Winnipeg—Until Nov. 26, by Greater Winnipeg Water Dist., for Contr. No. 56, building tunnel, shafts and well, at Red River crossing; Contr. No. 35, building gate house and intake at Waugh. W. G. Chace, ch. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Lynn—General Electric Co., 920 Western Ave., let contract building reservoir to Simpson Bros. Co., 166 Devonshire St., Boston.

N. Y., New York—(Official)—Bd. Water Supply, Municipal Bldg., let contract Shandaken tunnel, to Degnon Contg. Co., 68 Hunter's Point Ave., Long Island City, $12,138,738. Noted Oct. 4.

O., Akron—(Official)—City received low bids, Contr. No. 91, laying water pipe in Cuyahoga Falls Ave., Berwin, Camden, and Dayton Sts., from T. E. McShaffrey, 130 South College St.; P. Agrios, Akron, and F. Manalla, Kenmore.

★O., Akron—(Official)—City let contract building elevated steel water tank, to Chicago Bridge & Iron Wks., 37 West Van-Buren St., Chicago, $30,500. Noted Oct. 4.

★O., Willoughby — Village let contract building water-works, to Freshwater & Haffey, Willoughby, $44,946.

★Kan., Winfield—City let contract for 20,000 ft. 14-18 in. c.i. pipe, to Amer. Cast Iron Pipe Co., 716 Scarritt Bldg., Kansas City, Mo., $59,868.

★S. D., Ardmore—City let contract building water-works to A. C. Evans, Sheridan, Wyo., about $400,000.

★Cal., Bay Point—Bay Point Light & Water Co. let contract building reservoir to Lindgren & Co., Monadnock Bldg., San Francisco.

SEWERS

Proposed Work

Conn., Torrington—Boro. having plans prepared by C. A. Patterson, engr., c/o C. B. Elkvali, boro. clk., building outfall sewers. About $25,000.

Pa., Ellwood City—City having plans prepared by R. W. Pratt, engr., 708 Hippodrome Bldg., Cleveland, installing trunk sewers and sewage disposal plant. About $116,000.

Pa., Parnassus—Boro. had plans prepared by State Health Dept., Harrisburg, building sanitary sewerage system, intercepting sewers, sewage pumping station and sewage-treatment plant.

Pa., Reading—City had plans prepared by State Health Dept., Harrisburg, building sanitary sewers in Dist. No. 14; also for trunk sewer. W. H. Dechant, city engr.

W. Va., Martinsburg—City having plans prepared by T. Sparrow, engr., c/o P. W. Leighter, mayor, building storm sewers. About $25,000. Noted May 10.

N. C., Leaksville—See "Water-Works."

Fla., St. Petersburg—City to sell $30,000 bonds Nov. 20 to extend sewerage system. W. J. Overman, dir. pub. wks.

Tenn., Winchester—City voted $10,000 bonds to improve sewerage system.

O., Cincinnati—(Official) — City defeated $500,000 bond issue to build sewers. Noted Oct. 4.

O., Cleveland—(Official)—City voted $3,000,000 bonds to build sewers. R. Hoffman, city engr. Noted Nov. 1.

O., Columbus—See "Streets and Roads."

O., Elyria—City plans to build sewers in Dist. No. 3, Dilworth St. from Gulf to Harwood Sts., and on Harwood St. from Caroline St. to north line of Dilworth Allotment. C. M. Theobald, city engr. Noted Sept. 27.

O., Lima—City voted $155,000 bonds to build relief sewers. C. Bryson, city engr. Noted Oct. 4.

O., Marion—City plans to build sanitary sewer on Edwards St. from Silver St. to south end. H. H. Noyes, city engr.

O., Rocky River—Village lets contract about Nov. 30, building sewerage system and sewage disposal plant. About $90,000. R. W. Pratt, Hippodrome Bldg., Cleveland, engr. Noted Oct. 11.

Mich., Royal Oak—Village plans sewers on 7th, Knowles, 6th, East Harrison, and Hudson Sts.

Ill., Bradley—Village soon lets contract building sewerage system. About $175,000. Marr-Green Co., 17 South La Salle St., Chicago, engrs. Noted Oct. 18.

Ill., Granite City—City having plans prepared by E. Hall, engr., for lateral sewers. About $120,000.

Ill., Rock Island—Council passed ordinance to build 10-in. sewer drain in 9th St., from 34th to 45th Aves. About $13,797. W. Treichler, city engr.

Wis., Appleton—(Official)—City rejected bids opened Nov. 2 building sewers in various streets. Noted Oct. 25.

Wis., Wingra—City having plans prepared building sewers in Wingra Sewerage Dist. O. S. Norsman, clk.

Kan., Pittsburg—City defeated $75,000 bonds to build sewers. Noted Sept. 6.

Neb., Valparaiso—City plans to build sewerage system.

Mo., Macon — (Official) — City having plans prepared by F. L. Wilcox, engr., Syndicate Trust Bldg., St. Louis, for sewage disposal plant.

Mo., Kansas City—City having plans prepared for Blue River sanitary sewer. About $750,000. A. G. Ludlow, c/o Bd. Pub. Wks., engr.

Okla., Oklahoma — City plans storm sewers in 5 districts and sanitary sewers in 1 district, concrete or vitr. pipe. About $50,000. B. M. Hart, city engr.

Okla., Okmulgee—See "Water-Works."

Okla., Tulsa—City soon lets contract for 60 x 115-ft. intake. E. M. Stevens, 701 Ridge Bldg., Kansas City, Mo., engr. Noted July 26.

Colo., Arvada—City election soon to vote on bond issue to build sewerage system. J. Lercher, supt.

Wash., Bremerton—City plans to build sanitary sewers in Warren St. About $12,000.

N. S., New Glasgow—Town plans to build sewers on Water, Church and Front Sts. About $60,000. E. S. Frase, engr.

BIDS DESIRED

Neb., Lincoln—Until Nov. 19, by H. Berg, city clk., building 24-in. sanitary sewer from 20th and Vine Sts. to Salt Creek along west bank of Antelope Creek. About $13,900. A. Dobson, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Altamont—(Official)——City let contract building sewerage system and sewage-disposal plant, to E. B. Edgar, 729 Brandywine Ave., Schenectady, $41,000. Noted Oct. 25.

N. Y., Brooklyn—L. H. Pounds, boro. pres., received low bids Nov. 9th, building sewers in portions 39th St., from P. J. Donlon Contg. Co., 84 B'way., 121%; Kenmore Contg. Co., 6102 18th Ave., $121\frac{3}{10}$%; D. Donegan Co., 5904 14th Ave., 124%. Noted Nov. 1.

★Pa., Pittsburgh — See "Streets and Roads."

★N. C., Mooresville — See "Streets and Roads."

O., Hamilton—City received low bids for sewers in East Hamilton, Dist. No. 3, from L. A. Dillon and J. L. Walker Co., 231 Court St. Cost estimated at $11,068. Noted Oct. 4.

★O., Willoughby — Village let contract sewerage system, to Freshwater & Haffey, Willoughby, $30,225.

★Mich., Grand Rapids—(Official)—City let contracts building southwest sewerage system as follows: Sects. Nos. 1 and 4, Vander-Weele Bros., $76,453; No. 2, McDermott & Cooper, $56,296; No. 3, Ver Hey & Kloet, $46,194. Noted Oct. 18.

★Ill., Rock Island—Cities of Rock Island and Moline let contract installing first half 46th St. storm drain to Frazer-Davis Constr. Co., St. Louis, Mo., $27,863. Noted May 24.

★Minn., St. Paul—(Official)—City let contract building Otto-Niles sewerage system, to O'Neil & Preston, 60 East 6th St., $90,000. Noted Nov. 1.

★Kan., Towanda—City let contract building sewers, to C. C. Jamison, Eldorado. About $13,000.

★Wyo., Cheyenne — (Official) — City let contract extending sewers from O'Neil to Dillon St., to W. J. Wilseck, 2013 Pebrican St. Noted Oct. 25.

★Ariz., Glendale—City let contract building sanitary sewerage system, involving 35,369 ft. 8-15 in. pipe, 52 manholes, 2 flush tanks, etc., to C. Fisher & Co., 845 North 6th St., Phoenix, $46,797. Noted Oct. 18.

★Ariz., Phoenix—See "Streets and Roads."

★Ont., London—City let contract building sewers in Florence St., W. McCracken, 481 Central Ave.; Eleanor St., Mitchell & Mohan, c/o H. A. Brazier, city engr.; York St., J. McMurphy, 224 Queens Ave. About $18,000. Noted Nov. 1.

BRIDGES

Proposed Work

N. Y., Cohoes—City had plans prepared by W. Marden, engr., 24 James St., Albany, for bridge between Cohoes and Lansingburg. About $57,000.

Fla., Bradentown — See "Streets and Roads."

Fla., Miami—See "Streets and Roads."

Fla., West Palm Beach—See "Streets and Roads."

Mich., Detroit—(Official)—City defeated $3,000,000 bond issue to build Belle Island bridge, rein.-con. Noted Oct. 4.

Neb., Falls City—Richardson Co. election Nov. 27 to vote on $100,000 bonds to build bridges and culverts. F. J. Relf, co. engr.

BIDS DESIRED

Del., Milford—(Official)—Until Nov. 27, by Sussex Co., Georgetown, building twin 30-ft. rein.-con. bridge over Mispillion River. W. E. Hawkins, co. engr.

Fla., St. Augustine—(Official)—Until Dec. 10, by St. Johns Co. Comrs., building 2400 ft. rein.-con. bridge, with movable span in channel over Matangas River; also building 66 mi. hard surface roads, 15 ft. wide, including rein.-con. bridges and culverts. Bond election for project will probably be held in January or February.

O., Dayton—(Official)—Until Dec. 1, by Montgomery Co. Comrs., building approches to Shoup's Bridge over Stillwater River, Harrison Twp., involving 2100 cu.yd. earth embankment, 135 cu.yd. rock excav., 320 cu.yd. gravel in roadway, 542 lin.ft. guard rail. W. H. Aszling, clk.

Okla., Bartlesville—Until Nov. 19, by Washington Co., building 7 steel bridges. About $50,000. J. C. Mitchell, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Va., Richmond—City received low bid building rein.-con. viaduct over Bacon Quarter Branch and Seaboard Air Line Co.'s property, from W. P. Funsten & Co., Richmond, $74,000. Noted Oct. 18.

★W. Va., Big Chimney—Kanawha Co., Charleston, let contract building steel highway bridge over Elk River, near Big Chimney to Virginia Bridge & Constr. Co., $31,000. Noted Oct. 11.

Bridges (Continued)

★Ia., Oskaloosa—Mahaska Co. let contract building superstructures, 3 high truss bridges, to Clinton Bridge Wks., Clinton, $24,024; piers and floors, Ottumwa Supply & Constr. Co., Ottumwa, $17,700.

★Minn., Little Falls—(Official) — Morrison Co. let contract building Royal Mississippi River Bridge, to Minneapolis Bridge Co., 728 Metropolitan Bldg., Minneapolis, $35,890. Noted Oct. 18.

★Kan., Oswego—(Official)—Labette Co. let contract building 7 rein.-con. bridges, to M. E. Gillioz, Monett, Mo., $25,489. Noted Oct. 18.

★Idaho, Challis—Custer Co. let contract building 3 steel bridges and 41 rein.-con. culverts on Lost River Highway, between Challis and Mackay, to Missouri Valley Bridge & Iron Co., Leavenworth, Kan., $35,000.

★Wash., Blanchard—Skagit Co. let contract building viaduct over Great Northern R.R. tracks between Blanchard and Burlington; also ½ mi. approaches, to J. R. Wood, Seattle, $36,838.

★Cal., Santa Barbara—Associated Oil Co. let contract building suspension bridge over Santa Ynez River, to Mercer Fraser Co., Eureka, $25,000.

★Que., St. Alexis—City let contract building rein.-con. bridge, to Laberge & Dufour, St. Alexis, $14,800.

★Ont., Galt—Canadian Pacific Ry., let contract building rein.-con. bridge, to Sherwood Constr. Co., Ltd., Mail Bldg., Toronto, $20,000. Noted Aug. 16.

STRUCTURAL STEEL WORK

BIDS DESIRED

Okla., Bartlesville—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★O., Akron—See "Water-Works."

★Idaho, Challis—See "Bridges."

REINFORCED CONCRETE

Proposed Work

Mich., Detroit—See "Bridges."

Ia., Burlington—See "Industrial Works."

Colo., Grand Junction—See "Miscellaneous."

BIDS DESIRED

Del., Milford—See "Bridges."

Fla., St. Augustine—See "Bridges."

Tex., Barstow — See "Excavation and Dredging."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Va., Richmond—See "Bridges."

★W. Va., Big Chimney—See "Bridges."

★Kan., Oswego—See "Bridges."

★Mont., Boseman—See "Miscellaneous."

★Idaho, Challis—See "Bridges."

Cal., Long Beach—See "Miscellaneous."

★Que., St. Alexis—See "Bridges."

★Ont., Galt—See "Bridges."

STREETS AND ROADS

Proposed Work

New York—(Official) — State Highway Comn., 55 Lancaster St., Albany, rejected bids building 1.13 mi. Rd. No. 5217-A, Chautauqua Co., and .61 mi. Rd. No. 5590, Niagara Co. Noted Sept. 27.

N. Y., Center Moriches—Town of Brookhaven plans to improve road leading to Camp Upton from South Country Rd. at Center Moriches, crushed stone and oil-treated pavement. About $15,000. R. P. Howell, superv.

N. Y., Lowville—Lewis Co. sold $10,800 bonds to build highways. H. A. Williams, co. treas.

N. Y., Mayville—Chautauqua Co. voted $16,000 bonds to improve roads.

N. J., Camden—City plans paving River Ave. and 27th St., hard-surfaced material. L. E. Farnham, city engr.

N. J., Mount Holly — Bd Freeholders Burlington Co. plan to pave 4 mi. highway between Wrightstown and Georgetown, bituminous macadam.

Pa., Pittsburgh—(Official)—City Council passed ordinance to pave, grade and curb Salisbury St. from Sterling to Eleanor St.; Sutherland St., from Chartiers Ave., to Jean St.; North Homewood Ave., from Mount Vernon to Upland St.; 30th St., from Paulowna St. to Brereton Ave.; Universal St. from Chartiers Ave. to Lundy St.; Pioneer Ave. from Kenilworth Ave. to Jillson St.; Hancock St. from Dobson to 33rd St.; 38th St. from Liberty Ave. to Howley St.; Oberlin St. from Sprague St. to Lemington Ave.; Stayton St., from Woodland Ave. to Hodgkiss St.; Moyer St. from Allendale to Francisco St.; Smith Way from Boggs Ave. to Westwood St.; Tweed St. from Allendorf to Francisco St.; Edgerton Ave. from East End to Braddock Ave.; Hoffers Way from Roberts to Overhill St.; Jean St. from Fairdale to Sutherland St.; Jupiter Way from Hybia to Bainton St.; Juniata Pl. from Linden to Hastings St.; Lakewood Ave. from Lorenz Ave. to city limits; May Way from Glenn Way to Maripoe St.; Austin Way from South Rebecca to South Graham St.; Downing St. from west angle of Hancock St. to Hancock St.; Albion St. from Hamilton Ave. to Finance St.; Agnes Way from Hoffers Way to Linton St.; R. Swan, city engr.

Pa., Scranton — J. G. Hayes, dir. pub. wks., soon lets contract paving Boulevard Ave., from Electric to East Market St. W. A. Schunk, city engr.

N. C., Mocksville—Bd. Comrs. plan to issue $12,000 bonds to build sidewalks on portions Depot, South Main, Cherry, Salisbury, Furniture Factory, Pine and North Main Sts. and Sanford Ave., brick, block, sheet asphalt, bitulithic or bituminous concrete.

Ga., Folkston—Charlton Co. Comrs. plan $100,000 bond issue to build roads.

Fla., Bradentown—Manatee Co. plans to issue $200,000 bonds to build roads and bridges in Palmetto-Ellenton-Terra Cela-Gillete Dist. Noted Sept. 6.

Fla., Miami—Dade Co. to sell $140,000 bonds Nov. 20, to build roads and bridges. H. Crabtree, engr. Noted Sept. 6.

Fla., West Palm Beach—Palm Beach Co. voted $30 000 bonds to build roads and bridges, Lake Worth Special Rd. and Bridge Dist.

Ala., Birmingham—Bankhead Highway Assn. plans road between Birmingham and Georgia state line through Cleburne, Calhoun, Talladega, and St. Clair Cos. T. S. Flowman, Birminghom, pres.

Miss., Pascagoula—City plans to pave 3 mi. of streets. G. H. Hague, clk.

Tenn., Shelbyville—Bedford Co. plans to build about 20 mi. of Dixie Highway through county.

O., Ashland—City plans to improve and pave portions Walnut, Claremont, Miller, Pleasant and East 4th Sts., and Lincoln Way. R. R. Conn, city engr.

O., Cleveland—Cuyahoga Co. receives bids Dec. 8 for purchase of $64,995 bonds, to be used for improving So. Center Rd. No. 6.

O., Cleveland—City plans to grade, curb, and pave Independence Rd., S. E., from Fleet Ave., S. E. to city limits, brick on concrete foundation; West 7th Pl. from Railway Ave., S. W., to Novak Ave., S. E., brick on concrete base; Novak Ave., S. W. from 7th St. to West 5th St., brick on concrete base. R. Hoffman, city engr.

O., Columbus—(Official)—City plans to improve, by grading, asphalt paving, draining, curbing and building sewers, Neill Ave., from Goodale St. to 5th Ave., also 2nd alley north of Long St., from 20th to 22nd Sts. H. Maetzel, city engr.

O., Jefferson—Ashtabula Co. plans to build brick road, 14 mi., between Ashtabula and Conneaut.

O., Lima—City voted $75,000 bonds to be used toward paving 30 streets. Total cost, $50,000. C. Bryson, city engr.

O., Middletown—City plans to improve roadway of Curtis Ave., from Yankee Rd. to Kunz Ave., rein.-con., also lay lead water connections to water mains, from abutting property not already supplied with such connections. W. C. Morrison, city engr.

O., Salem—Council passed ordinance to pave and grade Garfield Ave., from north end to city limits, brick. A. French, city engr.

Ind., Columbus—Bartholomew Co. will receive new bids about December, building 11,074 ft. road in Flatrock Twp., and 11,294 ft. in German Twp., gravel. W. H. Scott, aud. Noted Oct. 4.

Ind., Ft. Wayne—State Highway Comn. appropriated $73,500 to improve Lincoln Highway in Allen Co. providing county appropriates like amount. Noted Oct. 11.

Ind., Goshen—Goshen Co. sold $10,000 bonds to build road in Concord Twp.

Michigan—State Bd., Lansing, voted $35,000 to be spent on completion of military road between Detroit, Mich., and Toledo, O. Co. will appropriate $15,000 toward same.

Mich., Cadillac—(Official)—City at election Nov. 6 voted favorably on $35,000 bond issue, which together with $25,000 from assessments, etc., will be used for paving streets, brick or wood block. T. V. Stephens, city mgr.

Mich., Gladwin—Gladwin Co. plans to improve road between here and Beaverton. About $24,000 available for same.

Mich., Grand Rapids—Kent Co. Comrs. plans election to vote on $100,000 bonds to build roads.

Ill., Carroll—Carroll Co. voted $13,000 bonds to build 15 ft. concrete slab roadway. S. C. Campbell, supt.

Ill., Chicago—Cooke Co. voted favorably on $1,000,000 bond issue to improve roads. Noted Oct. 11.

Ill., Havana—Mason Co. voted $55,000 bonds to build roads.

Ill., Springfield — Sangamon Co. voted $500,000 bonds to build state and federal aid roads. Noted Sept. 27.

Wis., Ft. Atkinson—City Council plans to issue $20,000 bonds to improve streets.

Wis., Racine—City plans to pave Baline Ave. from McKinzie to Osborne St., De Koven Ave., from Main to Mead St. About $49,658. P. H. Connolly, city engr.

Ia., Marshalltown—Marshall Co. plans to surface roads with gravel. About $200,000. J. M. Brown, Albion, co. engr.

Minn., Grand Rapids—Itasca Co. plans election to vote on $1,200,000 bond issue to build roads. F. Sherman, aud.

Minn., Minneapolis—City sold $242,085 bonds to widen 9th St. from Hennepin to Nicollet Ave. F. W. Cappelin, city engr. Noted Oct. 4.

Kan., Lindsborg—City soon lets contract paving 25,176 sq.ft. A. Monson, clk.

Mont., Hamilton—Ravalli Co., Hamilton, and Granite Co., Philisburg, will coöperate with U. S. Forest Service and build 25 mi. of roads. N. W. Blindhouse, Hamilton, engr.

Mo., Centerville — Reynolds Co. voted $100,000 bonds to build and improve roads. Noted Oct. 11.

Mo., Fulton—Callaway Co. plans election Nov. 24 to vote on $25,000 bond issue for road work.

Arkansas—State Highway Dept., Little Rock, prepared plans building 17 mi. road in Poinsett Co., Harrisburg. About $37,250.

Ark., Ft. Smith—City voted $18,000 bonds to extend roads and approaches to new bridge. Hedrick & Hedrick, Inter-State Bldg., Kansas City, Mo., engrs.

Ark., Hot Springs—City plans to pave 40,000 sq.yd. G. C. Smith, city engr.

Ark., Wynne—State Highway Dept. appropriated $12,516 for road work in Dist. No. 1, Cross Co. F. O. Cogbill, secy. co. comrs.

Tex., Columbus—Colorado Co. plans election to vote on $75,000 bonds issue to build roads.

Tex., Commerce — City voted bonds to pave all business streets.

Tex., Dickens—Comrs. Court of Dickens Co. plans election Nov. 17 to vote on $400,000 bond issue for road work.

Tex., Haskell—Haskell Co., Dist. No. 3, defeated $75 000 bonds to build roads. Noted Oct. 25.

Tex., Port Lavaca—Calhoun Co., Rd. Dist. No. 2, voted favorably, Oct. 20, on $75 000 bond issue to build and improve roads. Noted Sept. 27.

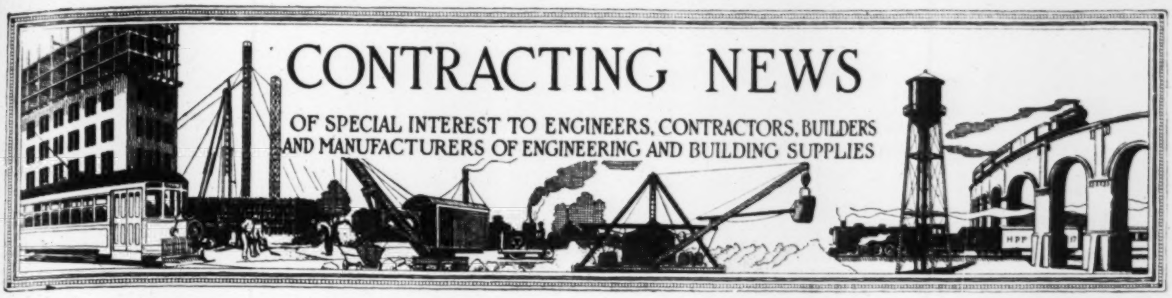
Okla., Oklahoma—City plans 100,000 yd. asphaltic concrete paving and various streets. About $250 000.

Okla., Sapulpa—Creek Co. voted $65,000 bonds to build roads in Shannon Twp.

Wash., Kelso—Cowlitz Co. having plans prepared building highway from Coal Bank Rd. to St. Helen on Toutle River. F. C. Kramer, co. engr.

Wash., Mount Vernon—Spagit Co. having plans prepared paving Olympia Marsh and Riverside Rd., 1 course concrete, 19 ft. wide. About $53,179.

Wash., Ritzville—Adams Co. Comrs. rejected bids building highway from city limits to Grant Co. line, 30 mi. Noted Oct. 4.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 51 to 53 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Nov. 16.	Winnipeg, Man.	Nov. 8
Nov. 19.	Tulsa, Okla.	Nov. 15
Nov. 19.	Wooster, O.	Nov. 8
Nov. 20.	Charleston, Miss.	Nov. 8
Nov. 26.	Euclid, O.	Nov. 8
Nov. 26.	Winnipeg, Man.	Nov. 8
Nov. 26.	Winnipeg, Man.	Nov. 15
Nov. 26.	York Twp., Ont.	Nov. 15
Nov. 27.	Akron, Ohio	Nov. 15
Dec. 3.	Winnipeg, Man.	Nov. 8

SEWERS

Nov. 16.	New York, N. Y.	Nov. 8
Nov. 17.	Appleton, Wis.	Nov. 8
Nov. 19.	Brainerd, Minn.	Nov. 1
Nov. 19.	Lincoln, Neb.	Nov. 15
Nov. 23.	Independence, Mo.	Nov. 8
Nov. 26.	Oil City, Pa.	Nov. 1

BRIDGES

Nov. 17.	Charleston, S. C.	Nov. 1
Nov. 17.	Bowling Green, Mo.	Nov. 8
Nov. 19.	Bartlesville, Okla.	Nov. 15
Nov. 19.	Charleston, S. C. Adv. Nov. 8.	Nov. 8
Nov. 27.	Milford, Del.	Nov. 15
Dec. 1.	Dayton, Ohio	Nov. 15
Dec. 4.	West Palm Beach, Fla.	Nov. 8
Dec. 10.	St. Augustine, Fla.	Nov. 15

STREETS AND ROADS

Nov. 17.	Indiana	Nov. 8
Nov. 17.	Knoxville, Tenn.	Nov. 15
Nov. 19.	Seattle, Wash.	Nov. 1
Nov. 19.	Brewton, Ala.	Nov. 1
Nov. 19.	St. Paul, Minn.	Nov. 15
Nov. 20.	Holdredge, Neb.	Nov. 1
Nov. 22.	Hindman, Ky.	Oct. 25
Nov. 23.	Kendallville, Ind.	Oct. 25
Nov. 24.	Charleston, W. Va.	Nov. 8
Nov. 27.	Rogersville, Tenn.	Nov. 15
Nov. 27.	Bayonne, N. J.	Nov. 15
Dec. 1.	Columbus, Ohio	Nov. 15
Dec. 3.	Scottsboro, Ala.	Nov. 15
Dec. 4.	Tuscumbia, Ala.	Nov. 8
Dec. 4.	Columbus, Neb.	Nov. 15
Dec. 5.	Red Wing, Minn.	Nov. 15

EXCAVATION AND DREDGING

Nov. 20.	Chatham Twp., Ont.	Nov. 15
Nov. 21.	Pipestone, Minn.	Nov. 15
Nov. 21.	Anoka, Minn.	Nov. 15
Nov. 22.	Glenwood, Minn.	Nov. 8
Nov. 22.	Memphis, Mo.	Nov. 8
Nov. 24.	Buffalo, Minn.	Nov. 15
Nov. 26.	Havana, Ill.	Nov. 15
Nov. 27.	Mankato, Minn.	Nov. 15
Dec. 1.	Barstow, Tex.	Nov. 15
Dec. 4.	Salina, Kan.	Nov. 15
Dec. 6.	Marion, O. Adv. Nov. 8.	Nov. 8

BUILDINGS

Bids Close		See Eng. News-Record
Nov. 18.	Storrs (Eagleville P. O.) Conn.	Nov. 15
Nov. 19.	Johnstown, Pa.	Nov. 15
Nov. 19.	Cleveland, Ohio	Nov. 15
Nov. 19.	Hartford, Conn.	Nov. 15
Nov. 20.	Barrie, Ont.	Nov. 15
Nov. 20.	Pleasant Plain, Ia.	Nov. 8
Nov. 22.	Owensboro, Ky.	Nov. 15
Nov. 25.	Middletown, Mass.	Oct. 4
Nov. 27.	Harrisburg, Pa.	Nov. 15
Nov. 30.	Strahan, Ia.	Nov. 15
Dec. 1.	Norfolk, Va.	Sept. 13
Dec. 1.	Glenville, W. Va.	Nov. 8
Dec. 3.	Olympia, Wash.	Nov. 15

FEDERAL GOVERNMENT WORK

Nov. 19.	Fitting out Cranes—Washington, D. C.	Oct. 18
Nov. 19.	Shipbuilding Ways — Brooklyn, N. Y.	Oct. 25
Nov. 19.	Electric Elevator—Norfolk, Va.	Nov. 1
Nov. 19.	Refrigerating Plant and Brine Circulating System—Washington, D. C.	Nov. 1
Nov. 19.	Timber Bulkheads, Boston, Mass.	Nov. 1
Nov. 19.	Filling—Key West, Fla.	Nov. 8
Nov. 19.	Dredging—San Francisco, Cal.	Nov. 15
Nov. 20.	Bridge—Washington, D. C.	Nov. 1
Nov. 20.	Post Office—Caribou, Me.	Oct. 18
Nov. 22.	Post Office—Basin, Wyo.	Oct. 25
Nov. 22.	Steel Pipe—San Francisco, Cal.	Nov. 15
Nov. 23.	Changes to Custom House —Boston, Mass.	Nov. 15
Nov. 23.	Post Office — Woodbury, N. J.	Oct. 25
Nov. 26.	Dry Dock Crane, Wash., D. C.	Oct. 25
Nov. 26.	Steel Towers—Washington, D. C.	Nov. 1
Nov. 26.	Electric Duct System — Charleston, W. Va.	Nov. 8
Nov. 26.	Radio Building—New Orleans, La.	Nov. 8
Nov. 26.	Reservoir — Philadelphia, Pa.	Nov. 8
Nov. 26.	Electric Generating System, Ft. Stanton, N. M. Adv. Nov. 8.	Nov. 8
Nov. 26.	Power Plant Improvements —Charleston, S. C.	Nov. 15
Nov. 26.	Addition to Boiler Shop—Mare Island (Vallejo P. O.) Cal.	Nov. 15
Nov. 27.	Post Office—Chapel Hill, N. C.	Oct. 25
Nov. 27.	Stone—New Orleans, La. Adv. Nov. 1 and 8.	Nov. 1
Nov. 28.	Post Office — Bellefourche, S. D.	Oct. 11
Nov. 29.	Post Office—McLeansboro, Ill.	Nov. 15
Nov. 30.	Post Office—Buffalo, Wyo. Adv. Nov. 1.	Nov. 1
Nov. 30.	Machinery, etc. — Cincinnati, O. Adv. Nov. 1 and 8.	Nov. 1
Dec. 3.	Incinerator — Mare Island (Vallejo P. O.) Cal.	Nov. 15
Dec. 5.	Post Office—Decatur, Ala.	Nov. 1
Dec. 5.	Bulkhead — New Orleans, La.	Nov. 8
Dec. 10.	Foam Fire Protection — Guantanoma, Cuba	Nov. 8
Dec. 10.	Heating System — Phila., Pa.	Nov. 15
Dec. 17.	Post Office—Denton, Tex.	Nov. 8
Dec. 18.	Laterals — Torrington, Wyo.	Nov. 1

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. J., Wharton — Boro voted $110,000 bonds to build water-works. Noted Oct. 11.

Pa., Phila.—City plans to rebuild Hartwell Ave. water-pipe line feeding Mt. Airy and section Chestnut Hill. About $100,000. C. E. Davis, city engr.

N. C., Leaksville—City plans to build water-works and sewerage systems. J. N. Ambler, Durham, engr.

S. C., Columbia—City plans to install one 3,000,000 gal. and two 5,000,000 gal. electrically-driven pumps with necessary equipment at water-works. About $30,000. D. C. Wyse, city engr.

La., Bossier City—City having plans prepared by Honaker & Swope, engrs., Shreveport, for water system, including 4- and 8-in. pipe, 1 electrical and 1 oil pipe, 50,000-gal. reservoir and 1 well. About $30,000. Noted May 10.

Ky., Irvine—Estill Water & Gas Co. plans to build water-works. About $25,000. H. L. Leete, engr. and supt.

Ky., Lawrenceburg — (Official) — City voted $15,000 bonds to build filtration plant. Noted Oct. 4.

O., Hamilton—City had plans prepared by State Bd. Health, Columbus, drilling 3 new 10-in. tubular wells, 152 ft. each, and installing new piping at well basin. About $16,000. F. E. Weaver, city engr.

Ind., South Bend—City plans to install 225,000-gal. reservoir. F. J. Anderson, city engr.

Ill., Cicero—Town plans to build water-works. About $31,850. J. Monkreig, town engr.

Ill., Quincy—City plans to improve water-works, including new standpipe. About $250,000. E. R. Chatten, city engr.

Wis., Milwaukee — City plans to build water purification plant. About $30,000. G. Staal, city engr.

Wis., New Richmond—City plans to improve water-works. Address J. E. Hughes.

Ia., Keokuk—City plans to install new machinery in water-works. About $16,000.

Kan., Junction City—City plans to issue $28,940 bonds to improve water-works. T. W. Dorn, clk.

Kan., La Crosse—City voted $22,000 bonds to build water-works. Noted Sept. 27.

Kan., McCracken — City voted $12,000 bonds to build water-works. L. L. Ryan, city clk. Noted Oct. 11.

S. D., Aberdeen—City voted $125,000 bonds to improve water-works. F. Lecoq, city engr.

N. D., Belfield—City plans to build water-works. About $30,000.

Mont., Geraldine — City voted $31,500 bonds to build water-works. Noted Sept. 20.

Tex., El Paso—City voted $100,000 bonds to improve water-works. J. N. Gladding, city engr.

Okla., Hunter—(Official)—Town defeated $26,000 bonds to build water-works. Noted Oct. 4.

Okla., Ponca City—City voted $20,000 bonds to improve water-works. G. G. O'Neill, supt. Noted Oct. 11.

Water-Works (Continued)

Colo., Sterling—City having plans prepared by A. A. Weiland, engr., Pueblo, improving water-works. Noted June 14.

Ore., Albany—City plans election in December to vote on $400,000 bond issue to improve water-works.

Ore., Richland—(Official) — City postponed indefinitely building water-works, owing to advance in price of materials. Noted Oct. 25.

Cal., Delano—City voted $45,000 bonds to build water-works.

Cal., El Centro — City voted $50,000 bonds to build filtration and purifying plant. Noted Sept. 27.

B. C., Delta—City plans to install electric pump and pump-house in East Delta. About $12,000. N. A. McDiarmid, city engr.

BIDS DESIRED

Okla., Tulsa—Until Nov. 19, by F. Newkirk, city aud., for 7200 ft. 24-in. c.-i. pipe. E. M. Stevens, 708 Ridge Bldg., Kansas City, Mo., engr. Noted Oct. 18.

Ont., York Township—(Official)—Until Nov. 26, by F. Barber, twp. engr., 40 Jarvis St., Toronto, trenching and laying water mains in Lauder and Glenholme Aves.

Man., Winnipeg—Until Nov. 26, by Greater Winnipeg Water Dist., for Contr. No. 56, building tunnel, shafts and well, at Red River crossing; Contr. No. 35, building gate house and intake at Waugh. W. G. Chace, ch. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Lynn—General Electric Co., 920 Western Ave., let contract building reservoir to Simpson Bros. Co., 166 Devonshire St., Boston.

N. Y., New York—(Official)—Bd. Water Supply, Municipal Bldg., let contract Shandaken tunnel, to Degnon Contg. Co., 68 Hunter's Point Ave., Long Island City, $12,138,738. Noted Oct. 4.

O., Akron—(Official)—City received low bids, Contr. No. 91, laying water pipe in Cuyahoga Falls Ave., Berwin, Camden, and Dayton Sts., from T. E. McShaffrey, 130 South College St.; P. Agrios, Akron, and F. Manalla, Kenmore.

★O., Akron—(Official)—City let contract building elevated steel water tank, to Chicago Bridge & Iron Wks., 37 West Van-Buren St., Chicago, $30,500. Noted Oct. 4.

★O., Willoughby — Village let contract building water-works, to Freshwater & Haffey, Willoughby, $44,946.

★Kan., Winfield—City let contract for 20,000 ft. 14-18 in. c.i. pipe, to Amer. Cast Iron Pipe Co., 716 Scarritt Bldg., Kansas City, Mo., $59,868.

★S. D., Ardmore—City let contract building water-works to A. C. Evans, Sheridan, Wyo., about $400,000.

★Cal., Bay Point—Bay Point Light & Water Co. let contract building reservoir to Lindgren & Co., Monadnock Bldg., San Francisco.

SEWERS

Proposed Work

Conn., Torrington—Boro. having plans prepared by C. A. Patterson, engr., c/o C. B. Elkvall, boro. clk., building outfall sewers. About $25,000.

Pa., Ellwood City—City having plans prepared by R. W. Pratt, engr., 708 Hippodrome Bldg., Cleveland, installing trunk sewers and sewage disposal plant. About $116,000.

Pa., Parnassus—Boro. had plans prepared by State Health Dept., Harrisburg, building sanitary sewerage system, intercepting sewers, sewage pumping station and sewage-treatment plant.

Pa., Reading—City had plans prepared by State Health Dept., Harrisburg, building sanitary sewers in Dist. No. 14; also for trunk sewer. W. H. Dechant, city engr.

W. Va., Martinsburg—City having plans prepared by T. Sparrow, engr., c/o P. W. Leighter, mayor, building storm sewers. About $25,000. Noted May 10.

N. C., Leaksville—See "Water-Works."

Fla., St. Petersburg—City to sell $30,000 bonds Nov. 20 to extend sewerage system. W. J. Overman, dir. pub. wks.

Tenn., Winchester—City voted $10,000 bonds to improve sewerage system.

O., Cincinnati—(Official) — City defeated $500,000 bond issue to build sewers. Noted Oct. 4.

O., Cleveland—(Official)—City voted $3,000,000 bonds to build sewers. R. Hoffman, city engr. Noted Nov. 1.

O., Columbus—See "Streets and Roads."

O., Elyria—City plans to build sewers in Dist. No. 3, Dilworth St. from Gulf to Harwood Sts., and on Harwood St. from Caroline St. to north line of Dilworth Allotment. C. M. Theobald, city engr. Noted Sept. 27.

O., Lima—City voted $155,000 bonds to build relief sewers. C. Bryson, city engr. Noted Oct. 4.

O., Marion—City plans to build sanitary sewer on Edwards St. from Silver St. to south end. H. H. Noyes, city engr.

O., Rocky River—Village lets contract about Nov. 30, building sewerage system and sewage disposal plant. About $90,000. R. W. Pratt, Hippodrome Bldg., Cleveland, engr. Noted Oct. 11.

Mich., Royal Oak—Village plans sewers on 7th, Knowles, 6th, East Harrison, and Hudson Sts.

Ill., Bradley—Village soon lets contract building sewerage system. About $175,000. Marr-Green Co., 17 South La Salle St., Chicago, engrs. Noted Oct. 18.

Ill., Granite City—City having plans prepared by E. Hall, engr., for lateral sewers. About $120,000.

Ill., Rock Island—Council passed ordinance to build 10-in. sewer drain in 9th St., from 34th to 45th Aves. About $13,797. W. Treichler, city engr.

Wis., Appleton—(Official)—City rejected bids opened Nov. 2 building sewers in various streets. Noted Oct. 25.

Wis., Wingra—City having plans prepared building sewers in Wingra Sewerage Dist. O. S. Norsman, clk.

Kan., Pittsburg—City defeated $75,000 bonds to build sewers. Noted Sept. 6.

Neb., Valparaiso—City plans to build sewerage system.

Mo., Macon — (Official) — City having plans prepared by F. L. Wilcox, engr., Syndicate Trust Bldg., St. Louis, for sewage disposal plant.

Mo., Kansas City—City having plans prepared for Blue River sanitary sewer. About $750,000. A. G. Ludlow, c/o Bd. Pub. Wks., engr.

Okla., Oklahoma — City plans storm sewers in 5 districts and sanitary sewers in 1 district, concrete or vitr. pipe. About $50,000. B. M. Hart, city engr.

Okla., Okmulgee—See "Water-Works."

Okla., Tulsa—City soon lets contract for 60 x 115-ft. intake. E. M. Stevens, 701 Ridge Bldg., Kansas City, Mo., engr. Noted July 26.

Colo., Arvada—City election soon to vote on bond issue to build sewerage system. J. Lercher, supt.

Wash., Bremerton—City plans to build sanitary sewers in Warren St. About $12,000.

N. S., New Glasgow—Town plans to build sewers on Water, Church and Front Sts. About $60,000. E. S. Frase, engr.

BIDS DESIRED

Neb., Lincoln—Until Nov. 19, by H. Berg, city clk., building 24-in. sanitary sewer from 20th and Vine Sts. to Salt Creek along west bank of Antelope Creek. About $13,900. A. Dobson, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Altamont—(Official)——City let contract building sewerage system and sewage-disposal plant, to E. B. Edgar, 729 Brandywine Ave., Schenectady, $41,000. Noted Oct. 25.

N. Y., Brooklyn—L. H. Pounds, boro. pres., received low bids Nov. 9th, building sewers in portions 39th St., from P. J. Donlon Contg. Co., 84 B'way., 121%; Kenmore Contg. Co., 6102 18th Ave., 121$\frac{3}{10}$%; D. Donegan Co., 5904 14th Ave., 124%. Noted Nov. 1.

★Pa., Pittsburgh — See "Streets and Roads."

★N. C., Mooresville — See "Streets and Roads."

O., Hamilton—City received low bids for sewers in East Hamilton, Dist. No. 3, from L. A. Dillon and J. L. Walker Co., 231 Court St. Cost estimated at $11,068. Noted Oct. 4.

★O., Willoughby — Village let contract sewerage system, to Freshwater & Haffey, Willoughby, $30,225.

★Mich., Grand Rapids—(Official)—City let contracts building southwest sewerage system as follows: Sects. Nos. 1 and 4, Vander-Weele Bros., $76,453; No. 2, McDermott & Cooper, $56,296; No. 3, Ver Hey & Kloet, $46,194. Noted Oct. 18.

★Ill., Rock Island—Cities of Rock Island and Moline let contract installing first half 46th St. storm drain to Frazer-Davis Constr. Co., St. Louis, Mo., $27,863. Noted May 24.

★Minn., St. Paul—(Official)—City let contract building Otto-Niles sewerage system, to O'Neil & Preston, 60 East 6th St., $90,000. Noted Nov. 1.

★Kan., Towanda—City let contract building sewers, to C. C. Jamison, Eldorado. About $13,000.

★Wyo., Cheyenne — (Official) — City let contract extending sewers from O'Neil to Dillon St., to W. J. Wilseck, 2013 Pebrican St. Noted Oct. 25.

★Ariz., Glendale—City let contract building sanitary sewerage system, involving 35,369 ft. 8-15 in. pipe, 52 manholes, 2 flush tanks, etc., to C. Fisher & Co., 845 North 6th St., Phoenix, $46,797. Noted Oct. 18.

★Ariz., Phoenix—See "Streets and Roads."

★Ont., London—City let contract building sewers in Florence St., W. McCracken, 481 Central Ave.; Eleanor St., Mitchell & Mohan, c/o. H. A. Brazier, city engr.; York St., J. McMurphy, 224 Queens Ave. About $18,000. Noted Nov. 1.

BRIDGES

Proposed Work

N. Y., Cohoes—City had plans prepared by W. Marden, engr., 24 James St., Albany, for bridge between Cohoes and Lansingburg. About $57,000.

Fla., Bradentown — See "Streets and Roads."

Fla., Miami—See "Streets and Roads."

Fla., West Palm Beach—See "Streets and Roads."

Mich., Detroit—(Official)—City defeated $3,000,000 bond issue to build Belle Island bridge, rein.-con. Noted Oct. 4.

Neb., Falls City—Richardson Co. election Nov. 27 to vote on $100,000 bonds to build bridges and culverts. F. J. Relf, co. engr.

BIDS DESIRED

Del., Milford—(Official)—Until Nov. 27, by Sussex Co., Georgetown, building twin 30-ft. rein.-con. bridge over Mispillion River. W. E. Hawkins, co. engr.

Fla., St. Augustine—(Official)—Until Dec. 10, by St. Johns Co. Comrs., building 2400 ft. rein.-con. bridge, with movable span in channel over Matangas River; also building 66 mi. hard surface roads, 15 ft. wide, including rein.-con. bridges and culverts. Bond election for project will probably be held in January or February.

O., Dayton—(Official)—Until Dec. 1, by Montgomery Co. Comrs., building approches to Shoup's Bridge over Stillwater River, Harrison Twp., involving 2100 cu.yd. earth embankment, 135 cu.yd. rock excav., 320 cu.yd. gravel in roadway, 542 lin.ft. guard rail. W. H. Aszling, clk.

Okla., Bartlesville—Until Nov. 19, by Washington Co., building 7 steel bridges. About $50,000. J. C. Mitchell, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Va., Richmond—City received low bid building rein.-con. viaduct over Bacon Quarter Branch and Seaboard Air Line Co.'s property, from W. P. Funsten & Co., Richmond, $74,000. Noted Oct. 18.

★W. Va., Big Chimney—Kanawha Co., Charleston, let contract building steel highway bridge over Elk River, near Big Chimney to Virginia Bridge & Constr. Co., $31,000. Noted Oct. 11.

Bridges (Continued)

★**Ia., Oskaloosa**—Mahaska Co. let contract building superstructures, 3 high truss bridges, to Clinton Bridge Wks., Clinton, $24,024; piers and floors, Ottumwa Supply & Constr. Co., Ottumwa, $17,700.

★**Minn., Little Falls**—(Official) — Morrison Co. let contract building Royal Mississippi River Bridge, to Minneapolis Bridge Co., 728 Metropolitan Bldg., Minneapolis, $35,890. Noted Oct. 18.

★**Kan., Oswego**—(Official)—Labette Co. let contract building 7 rein.-con. bridges, to M. E. Gillioz, Monett, Mo., $25,489. Noted Oct. 18.

★**Idaho, Challis**—Custer Co. let contract building 3 steel bridges and 41 rein.-con. culverts on Lost River Highway, between Challis and Mackay, to Missouri Valley Bridge & Iron Co., Leavenworth, Kan., $35,000.

★**Wash., Blanchard**—Skagit Co. let contract building viaduct over Great Northern R. R. tracks between Blanchard and Burlington; also ½ mi. approaches, to J. R. Wood, Seattle, $36,838.

★**Cal., Santa Barbara**—Associated Oil Co. let contract building suspension bridge over Santa Ynez River, to Mercer Fraser Co., Eureka, $25,000.

★**Que., St. Alexis**—City let contract building rein.-con. bridge, to Laberge & Dufour, St. Alexis, $14,800.

★**Ont., Galt**—Canadian Pacific Ry., let contract building rein.-con. bridge, to Sherwood Constr. Co., Ltd., Mail Bldg., Toronto, $20,000. Noted Aug. 16.

STRUCTURAL STEEL WORK

BIDS DESIRED

Okla., Bartlesville—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**O., Akron**—See "Water-Works."

★**Idaho, Challis**—See "Bridges."

REINFORCED CONCRETE

Proposed Work

Mich., Detroit—See "Bridges."

Ia., Burlington—See "Industrial Works."

Colo., Grand Junction—See "Miscellaneous."

BIDS DESIRED

Del., Milford—See "Bridges."

Fla., St. Augustine—See "Bridges."

Tex., Barstow—See "Excavation and Dredging."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Va., Richmond—See "Bridges."

★**W. Va., Big Chimney**—See "Bridges."

★**Kan., Oswego**—See "Bridges."

★**Mont., Boseman**—See "Miscellaneous."

★**Idaho, Challis**—See "Bridges."

Cal., Long Beach—See "Miscellaneous."

★**Que., St. Alexis**—See "Bridges."

★**Ont., Galt**—See "Bridges."

STREETS AND ROADS

Proposed Work

New York—(Official) — State Highway Comn., 55 Lancaster St., Albany, rejected bids building 1.13 mi. Rd. No. 5217-A, Chautauqua Co., and .61 mi. Rd. No. 5590, Niagara Co. Noted Sept. 27.

N. Y., Center Moriches—Town of Brookhaven plans to improve road leading to Camp Upton from South Country Rd. at Center Moriches, crushed stone and oil-treated pavement. About $15,000. R. P. Howell, superv.

N. Y., Lowville—Lewis Co. sold $10,800 bonds to build highways. H. A. Williams, co. treas.

N. Y., Mayville—Chautauqua Co. voted $16,000 bonds to improve roads.

N. J., Camden—City plans paving River Ave. and 27th St., hard-surfaced material. L. E. Farnham, city engr.

N. J., Mount Holly—Bd. Freeholders Burlington Co. plan to pave 4 mi. highway between Wrightstown and Georgetown, bituminous macadam.

Pa., Pittsburgh—(Official)—City Council passed ordinance to pave, grade and curb Salisbury St. from Sterling to Eleanor St.; Sutherland St., from Chartiers Ave., to Jean St.; North Homewood Ave., from Mount Vernon to Upland St.; 30th St., from Paulowna St. to Brereton Ave.; Universal St. from Chartiers Ave. to Lundy St.; Pioneer Ave. from Kenilworth Ave. to Jillson St.; Hancock St. from Dobson to 33rd St.; 38th St. from Liberty Ave. to Howley St.; Oberlin St. from Sprague St. to Lemington Ave.; Stayton St., from Woodland Ave. to Hodgkiss St.; Moyer St. from Allendale to Francisco St.; Smith Way from Boggs Ave. to Westwood St.; Tweed St. from Allendorf to Francisco St.; Edgerton Ave. from East End to Braddock Ave.; Hoffers Way from Roberts to Overhill St.; Jean St. from Fairdale to Sutherland St.; Jupiter Way from Hybia to Bainton St.; Juniata Pl. from Linden to Hastings St.; Lakewood Ave. from Lorenz Ave. to city limits; May Way from Glenn Way to Maripoe St.; Austin Way from South Rebecca to South Graham St.; Downing St. from west angle of Hancock St. to Hancock St.; Albion St. from Hamilton Ave. to Finance St.; Agnes Way from Hoffers Way to Linton St.; R. Swan, city engr.

Pa., Scranton — J. G. Hayes, dir. pub. wks., soon lets contract paving Boulevard Ave., from Electric to East Market St. W. A. Schunk, city engr.

N. C., Mocksville—Bd. Comrs. plan to issue $12,000 bonds to build sidewalks on portions Depot, South Main, Cherry, Salisbury, Furniture Factory, Pine and North Main Sts. and Sanford Ave., brick, block, sheet asphalt, bitulithic or bituminous concrete.

Ga., Folkston—Charlton Co. Comrs. plan $100,000 bond issue to build roads.

Fla., Bradentown—Manatee Co. plans to issue $200,000 bonds to build roads and bridges in Palmetto-Ellenton-Terra Cela-Gillete Dist. Noted Sept. 6.

Fla., Miami—Dade Co. to sell $140,000 bonds Nov. 20, to build roads and bridges. H. Crabtree, engr. Noted Sept. 6.

Fla., West Palm Beach—Palm Beach Co. voted $30 000 bonds to build roads and bridges, Lake Worth Special Rd. and Bridge Dist.

Ala., Birmingham—Bankhead Highway Assn. plans road between Birmingham and Georgia state line through Cleburne, Calhoun, Talladega, and St. Clair Cos. T. S. Flowman, Birminghom, pres.

Miss., Pascagoula—City plans to pave 3 mi. of streets. G. H. Hague, clk.

Tenn., Shelbyville—Bedford Co. plans to build about 20 mi. of Dixie Highway through county.

O., Ashland—City plans to improve and pave portions Walnut, Claremont, Miller, Pleasant and East 4th Sts., and Lincoln Way. R. R. Conn, city engr.

O., Cleveland—Cuyahoga Co. receives bids Dec. 8 for purchase of $64,995 bonds, to be used for improving So. Center Rd. No. 6.

O., Cleveland—City plans to grade, curb, and pave Independence Rd., S. E., from Fleet Ave., S. E., to city limits, brick on concrete foundation; West 7th Pl. from Railway Ave., S. W., to Novak Ave., S. E., brick on concrete base; Novak Ave., S. W. from 7th St. to West 5th St., brick on concrete base. R. Hoffman, city engr.

O., Columbus—(Official)—City plans to improve, by grading, asphalt paving, draining, curbing and building sewers, Neill Ave., from Goodale St. to 5th Ave., also 2nd alley north of Long St., from 20th to 22nd Sts. H. Maetzel, city engr.

O., Jefferson—Ashtabula Co. plans to build brick road, 14 mi., between Ashtabula and Conneaut.

O., Lima—City voted $75,000 bonds to be used toward paving 30 streets. Total cost, $50,000. C. Bryson, city engr.

O., Middletown—City plans to improve roadway of Curtis Ave., from Yankee Rd. to Kunz Ave., rein.-con., also lay lead water connections to water mains, from abutting property not already supplied with such connections. W. C. Morrison, city engr.

O., Salem—Council passed ordinance to pave and grade Garfield Ave., from north end to city limits, brick. A. French, city engr.

Ind., Columbus—Bartholomew Co. will receive new bids about December, building 11,074 ft. road in Flatrock Twp., and 11,294 ft. in German Twp., gravel. W. H. Scott, aud. Noted Oct. 4.

Ind., Ft. Wayne—State Highway Comn. appropriated $73,500 to improve Lincoln Highway in Allen Co. providing county appropriates like amount. Noted Oct. 11.

Ind., Goshen—Goshen Co. sold $10,000 bonds to build road in Concord Twp.

Michigan—State Bd., Lansing, voted $35,000 to be spent on completion of military road between Detroit, Mich., and Toledo, O. Co. will appropriate $15,000 toward same.

Mich., Cadillac—(Official)—City at election Nov. 6 voted favorably on $35,000 bond issue, which together with $25,000 from assessments, etc., will be used for paving streets, brick or wood block. T. V. Stephens, city mgr.

Mich., Gladwin—Gladwin Co. plans to improve road between here and Beaverton. About $24,000 available for same.

Mich., Grand Rapids—Kent Co. Comrs. plans election to vote on $100,000 bonds to build roads.

Ill., Carroll—Carroll Co. voted $13,000 bonds to build 15 ft. concrete slab roadway. S. C. Campbell, supt.

Ill., Chicago—Cooke Co. voted favorably on $1,000,000 bond issue to improve roads. Noted Oct. 11.

Ill., Havana—Mason Co. voted $55,000 bonds to build roads.

Ill., Springfield — Sangamon Co. voted $500,000 bonds to build state and federal aid roads. Noted Sept. 27.

Wis., Ft. Atkinson—City Council plans to issue $20,000 bonds to improve streets.

Wis., Racine—City plans to pave Baline Ave. from McKinzie to Osborne St., De Koven Ave., from Main to Mead St. About $49,658. P. H. Connolly, city engr.

Ia., Marshalltown—Marshall Co. plans to surface roads with gravel. About $200,000. J. M. Brown, Albion, co. engr.

Minn., Grand Rapids—Itasca Co. plans election to vote on $1,200,000 bond issue to build roads. F. Sherman, aud.

Minn., Minneapolis—City sold $242,085 bonds to widen 9th St. from Hennepin to Nicollet Ave. F. W. Cappelin, city engr. Noted Oct. 4.

Kan., Lindsborg—City soon lets contract paving 25,176 sq.ft. A. Monson, clk.

Mont., Hamilton—Ravalli Co., Hamilton, and Granite Co., Philisburg, will coöperate with U. S. Forest Service and build 25 mi. of roads. N. W. Blindhouse, Hamilton, engr.

Mo., Centerville — Reynolds Co. voted $100 000 bonds to build and improve roads. Noted Oct. 11.

Mo., Fulton—Callaway Co. plans election Nov. 24 to vote on $25,000 bond issue for road work.

Arkansas—State Highway Dept., Little Rock, prepared plans building 17 mi. road in Poinsett Co., Harrisburg. About $37,250.

Ark., Ft. Smith—City voted $18,000 bonds to extend roads and approaches to new bridge. Hedrick & Hedrick, Inter-State Bldg., Kansas City, Mo., engrs.

Ark., Hot Springs—City plans to pave 40,000 sq.yd. G. C. Smith, city engr.

Ark., Wynne—State Highway Dept. appropriated $12,516 for road work in Dist. No. 1, Cross Co. F. O. Cogbill, secy. co. comrs.

Tex., Columbus—Colorado Co. plans election to vote on $75,000 bonds issue to build roads.

Tex., Commerce — City voted bonds to pave all business streets.

Tex., Dickens—Comrs. Court of Dickens Co. plans election Nov. 17 to vote on $400,000 bond issue for road work.

Tex., Haskell—Haskell Co., Dist. No. 3, defeated $75,000 bonds to build roads. Noted Oct. 25.

Tex., Port Lavaca—Calhoun Co., Rd. Dist. No. 2, voted favorably, Oct. 20, on $75 000 bond issue to build and improve roads. Noted Sept. 27.

Okla., Oklahoma—City plans 100,000 yd. asphaltic concrete paving and various streets. About $250,000.

Okla., Sapulpa—Creek Co. voted $65,000 bonds to build roads in Shannon Twp.

Wash., Kelso—Cowlitz Co. having plans prepared building highway from Coal Bank Rd. to St. Helen on Toutle River. F. C. Kramer, co. engr.

Wash., Mount Vernon—Spagit Co. having plans prepared paving Olympia Marsh and Riverside Rd., 1 course concrete, 19 ft. wide. About $53,179.

Wash., Ritzville—Adams Co. Comrs. rejected bids building highway from city limits to Grant Co. line, 30 mi. Noted Oct. 4.

Streets and Roads (Continued)

Wash., Seattle—Puget Mill Co., Walker Bldg., soon lets contract grading, building sidewalks and paving streets in Westholme Addition on Faunteleroy and 35th Aves. About $100,000.

Cal., Calexico—City soon lets contract paving main streets with bitulithic on 5 in. concrete base and 2 in. top, and other streets with warrenite, 4 in. concrete, base and 1½ in. top. Following are streets to be paved:

2nd St., full width to Blair Ave., and strip 20 ft. wide in center of street from Blair to east city limits.

Imperial Ave., full width to 7th St., and strip 20 ft. wide in center of street from 7th St. to north city limits.

Heber Ave., full width from 2nd to Sherman St., to north end of high school grounds.

3rd St., widened to 56 ft. and paved full width to Mary St.

7th St., full width from Emerson to Heber St.

4th, 5th and 6th Sts. from Emerson to Imperial St.

7th St. from Imperial to Heber St., 3rd St. from Heber to Mary St.

Emerson St. full width from 3rd to 7th St.

Cal., San Diego—San Diego Co. plans to build 80 mi. scenic boulevard. W. S. Dorland, interested.

Cal., Santa Maria—City plans to pave Main St. About $30,000.

N. S., New Glasgow—City voted $11,000 bonds to extend Archimedes St.

Ont., Sandwich West Twp.—City plans to pave Front Rd., from Turkey Creek to Chappus Corners. About $27,000. C. E. Bondy, Loisellville, clk.

Ont., Winona—See "Industrial Works."

BIDS DESIRED

N. J., Bayonne—(Official) — Until Nov. 27, by city, laying concrete sidewalks on East 22nd St., from Prospect Ave. to Ave. I, involving 60,000 sq.ft. excav. W. P. Lee, clk. W. L. Clarkson, city engr.

Fla., St. Augustine—See "Bridges."

Ala., Scottsboro—Until Dec. 3, by Jackson Co. Comrs., macadamizing part State Trunk Rd., No. 4, between Woodville and Limrock, involving 9000 cu.yd. crushed stone. About $10,000. W. S. Keller, state highway engr. Noted Aug. 16.

Tenn., Knoxville—Until Nov. 17, by city, macadamizing, grading, and repaving Fremont Ave., Bway., Middlebrook Pike and Blow Ferry Rd. J. B. McCalla, city engr. Noted July 12.

Tenn., Rogersville—Until Nov. 27, by Hawkins Co. Comrs., building 6 mi. highway from Stoney Point to Stanley Valley. R. L. Williams, engr.

Ky., Owensboro—Until Nov. 22, by Fiscal Court, Daviess Co., building Graves Lane Rd., Ware, Livermore, Boonsville, Curdsville and 2 sections of Hardinsburg Rd. About $140,000. Former contract rescinded. Noted Nov. 8.

O., Columbus—Until Dec. 1, by Franklin Co. Comrs., grading and macadamizing roads in Jefferson and Mifflin Twps. J. Dunn, co. engr.

Minn., Red Wing — Until Dec. 5, by Goodhue Co., building Minnesota Federal Aid Project No. 11, involving 3 acres clearing, 3.6 acres grading, 55,887 cu.yd. side ditching, 5775 cu.yd. guard rail, etc. C. H. Meyer, co. aud.

Minn., St. Paul—Until Nov. 19, by Ramsey Co. Comrs., macadamizing Bald Eagle Lake Ave., from Buffalo St. to Taylor Ave., grading, claying and graveling Robinson Lake Rd. from New Brighton Rd. east to Hamiline Ave. G. S. Ries, co. aud.

Minn., St. Paul—Until Nov. 19, by H. W. Austin, purch. agt., grading alley in block 11, Blvd. Addition, Cook St., between Duluth Ave. and water-works, Palace St., between Cleveland and Cretin Aves., James St., between Cretin and Cleveland Aves., alley in block 8, Lovering Park, and block 7, Quimby Park, Underwood Ave., between Randolph and Hartford Sts.; Juno St., between Underwood Ave. and Kipp's College Park Addition; Niles St., near Underwood Ave.; Watson St., near Underwood Ave.; Hartford Ave. near Fairview Ave. O. Claussen, city engr.

Neb., Columbus—Until Dec. 4, by City, for 29,528 sq.yd. paving. L. Gottschalk, special engr.

California—Until Nov. 26, by State Highway Dept., Sacramento, grading 8 mi. in Mendocino Co. between Willits and Gould; paving in Butte Co., between Briggs and Nelson, and in Monterey Co., between San Ardo and Lucas, 8 mi., concrete.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Rhode Island — (Official) — State Bd. Pub. Rds., Providence, let contract building section state highway in South Kingstown, to Perrin & Cadario, Boston, Mass., $62,660. Noted Nov. 8.

★New York—(Official)—State Highway Comr., 55 Lancaster St., Albany, let contract building .12 mi. Rd. No. 5217-A, Chautauqua Co. to S. B. Van Wagenen, Inc., Rondout, $2767; 8 mi. Rd. No. 1315, Niagara Co., E. J. Latus, Albany, $62,560; .70 mi. Rd. No. 5547, Oneida Co., W. P. McDonald Constr. Co., Lakeland, Fla., $20,733; Rd. No. 5044, Mexico-Union Sq., Part 1, Oswego Co., F. H. Wells, Savannah, N. Y., $10,359. Noted Oct. 4.

N. Y., Brooklyn—L. H. Pounds, boro. pres., received only bid, Nov. 9, regulating, paving and repaving roadway of 54th St., from 9th Ave. to Ft. Hamilton Pkway., from Cranford Co., 52 Ninth St., $10,327. Noted Nov. 1.

★N. Y., Buffalo—City let contract paving Stewart and Wohlers Aves., asphalt on concrete foundation, to H. P. Burgard Co., 196 Filmore Ave., Exchange Pl., to Erie Contg. Co., Morgan Bldg. Noted Nov. 1.

★N. Y., Buffalo—City let contract paving Breckenridge St., sandstone on concrete base, to Erie Contg. Co., Morgan Bldg. Noted Oct. 11.

★N. Y., Yonkers—City let contract for curbing and building sidewalks on McLean Ave. between Central Av . and Lawton St., grading and improving 242nd St. from McLean Ave. to south city line, regulating, grading and improving Martha Ave. from McLean Ave. to city line, to W. Hopper, Yonkers. About $15,087.

N. Y., Yonkers—Bd. Contract and Supply received low bids resurfacing Central Ave. from south to north city limits, from J. E. Pawson Co., 58 Wells Ave., $16,050; J. J. Hart, 280 Nepperhan Ave., $16,991; Yonkers Contg. Co., $21,210.

N. J., Elizabeth—(Official)—Bd. Wks. received low bid repaving Cross Ave. sheet asphalt on concrete base, from Standard Bitulithic Co., Essex Bldg., Newark, $23,201; Uvalde Asphalt Paving Co., 1 Bway., New York City, $23.791; Northern Constr. Co., 665 Broad St., Newark, $23,826. Noted Nov. 1.

★N. J., Jersey City—City let contract paving 4420 sq.yd. on Gates Ave., asphalt on concrete base, also 550 sq.yd. Belgian blocks, on concrete base, together with curbing, grading, etc., to W. T. Crichfield, 2 Green St. Noted Nov. 1.

★N. J., Newark—(Official)—City let contract paving North 6th, Geneva and North Canal Sts., to Newark Paving Co., 133 1st St., $33,831, $10,382 and $15,235 respectively. Noted Oct. 4.

★N. J. Newark—Bd. Pub. Wks. let contract paving Renner Ave., bitulithic, to Standard Bitulithic Co., 31 Clinton St. About $26,861. Noted Oct. 25.

★N. J., West Orange—(Official)—City let contract paving portion Valley Rd., to T. G. Schriver, 28 Boyden St., East Orange, $10,523. Noted Oct. 18.

Pennsylvania — (Official) — State Highway Comn., Harrisburg, received low bids for 7857 ft. vitr. block pavement, Cornplanter Twp., Venango Co., from J. E. Richey, S. W. Cramer and J. McSnow, Franklin, $52,888; Keystone Constr. Co., Meadville, $68,178; C. E. Wood, Inc., Albany, N. Y., $82,853; 21,426 ft. State Highway Route 246, Alleghany Co., from R. Swan Co., Jenkins Arcade, Pittsburgh, $221,206; Donald McNeil Co., Jenkins Arcade, Pittsburgh, $161,977; 39,340 ft. State Highway Route 269, Lincoln and Jenner Twps. and Jennertown Boro., from D. E. Keller, Somerset, $294,827; Donald McNeil Co., Jenkins Arcade, Pittsburgh, $345,564. Noted Oct. 18.

★Pa., Pittsburgh—City let contract grading, paving, curbing and building sewers in various streets to Neelan & Daly, 214 Fitzsimmons Bldg., $10,197; T. Cronin, South 17th and Muriel Sts., $10,317; C. Donatelli, 1313 Collier St., $15,863.

★Md., Towson—Baltimore Co. let contract improving Viaduct Rd., to W. H. Thompson, Relay, Md.

★N. C., Mooresville — City let contract improving several streets, involving 11,000 sq.yd. paving, 2 mi. sidewalks, grading, curbing, and building storm sewers, to R. M. Hudson Co., Concord, as follows: Excav., 49c. per cu.yd., 4 in. concrete foundation, 85c. per sq.yd., sheet asphalt wearing surface, 1½ in. binder, 1½ in. top, using oil asphalt, 5 year guaranteed, $1.19 per sq.yd.

★S. C., Charleston—(Official)—City let contract paving 8500 sq.yd. concrete, to General Road & Drainage Constr. Co., 4 Broad St., $1.815 per sq.yd. Noted Oct. 4.

★Fla., Tampa—Hillsborough Co. Comrs. let contract building roads through Pasco, Polk, Manatee and Pinellas Cos., including 35.32 mi. brick road, 9 ft. wide; 20.36 mi. asphalt block road, 15 ft. wide; also several bridges, to Davis & Webb, Tampa. About $860,616. Noted Oct. 4.

★Ky., Owensboro—Davies Co. let contract paving several roads, to M. G. Moore, $24,708.

★O., Napoleon—Henry Co. let contract paving 8½ mi. macadam-bound road, to K. A. Westrick, Holgate. About $83,000.

★Indiana—(Official)—Bd. Co. Comrs. let contract building roads as follows:

Marion Co., Indianapolis, building and improving Southeastern Ave., Warren Twp., to E. W. Gant & Co., Greenfield, $78,400.

Marshall Co., Plymouth, building 5 gravel roads as follows: O'Connor Rd. to H. L. Short, Lakeville, $9650; Thomas Rd., to H. M. Lee, Logansport, $9810. Sickmiller, Milner and Urschel Rds. to Becker Enyart Co., Fulton, $13,860, $13,350 and $32,290 respectively.

Jasper Co., Rensselaer; 2 stone roads, Marion and Barkley Twps., to A. S. Keene, Wheatfield, $11,800, and A. McCoy, Lowell, $13,885.

Harrison Co., Corydon, building 11,471 ft. road between Posey and Webster Twps. to C. J. Treece, Elizabeth, $9000. Noted Oct. 11.

★Mich., Detroit—City let contract grading, asphaltic concrete paving, and curbing, to Detroit Asphalt Paving Co., McGraw Bldg.; Shoemaker Ave., $25,084, Coplin Ave., $11,856; also paving various alleys to R. J. Powelson, Detroit. About $41,000.

★Minn., Minneapolis—Hennepin Co. let contract building Rd. No. 29, Cedar Ave., to S. K. Grocs & Son, Kansote Bldg. About $30,000.

★Kan., Kansas City—(Official)—Wyandotte Co. let contract repaving Kaw Valley Rd., 5½ mi., to Readscker & Bouseman, Rosedale, Kan., $23,500. Noted Oct. 18.

★Mo., Kansas City—Bd. Educ. let contract paving school yard, Pacific and Tracy Sts., to Kansas City Constr. Co., Spring and Grand Aves. About $23,573.

★Tex., Dallas—City let contract 60,000 sq.yd. 2-in. rock asphalt paving on 5-in. concrete base, to Standard Eng. Contg. Co., 308 Interurban Bldg., $150,000.

★Ariz., Phoenix — City let contract to Southwestern Constr. Co. for improving 3rd St., involving 9060 sq.yd. bitulithic pavement, $1.80 per sq.yd., 4327 lin.ft. combined concrete curb and gutter, $1.15 per lin.ft.; 340 lin.ft. curb, 70c.; 145 lin.ft. curb, 70c.; 522 lin.ft. valley gutter, $1.10; 269 lin.ft. 12-in. concrete pipe, $1.35; 51 lin.ft. 16-in. concrete pipe, $1.75; 273 lin.ft. corrugated iron pipe, $3.50; 2 gutter inlets, $65 each, storm water manhole, $275, 8 standpipes, $20 each, 16 sheet metal gates, $5.50 each.

★Wash., Colville—Stevens Co. let contract clearing, grubbing, grading and ditching, Addy-Gifford Permanent Highway No. 1, 4½ mi., to Acorn & Son, Colville, $15,955.

★Wash., Ephrata—(Official)—Grant Co. Comrs. let contract surfacing 3 mi. Permanent Highway No. 10; also 2 mi. Permanent Highway No. 8A, to F. J. Cole, Warden, $10,885 and $5871 respectively. Noted Oct. 11.

★Wash., Wapato—City let contract paving Wapato Ave., to Washington Paving Co., L. C. Smith Bldg., Seattle, $28,588.

California — (Official) — State Highway Comn., Sacramento, received low bids building Div. 7, Route 9, Sect. "A," state highway in Los Angeles Co., from A. L. McCray, 234 West 28th St., Los Angeles, $111,251; F. Hoffman, 111 East 12th St., Long Beach, $117,275; G. R. Curtis, 2440 East 26th St., Los Angeles, $141,135; Div. 6, Route 4, Sect. "B," Fresno Co., (a) 1A asphalt wear-

Streets and Roads (Continued)

ing surface, (b) 2A asphalt wearing surface. Blanchard-Brown Co., Call Bldg., San Francisco, (a) $22,824; Worswick Street Paving Co., Union Natl. Bank Bldg., Fresno, (a) $23,775, (b) $25,677, Federal Constr. Co., Sharon Bldg., San Francisco, (a) $39,625, (b) $41,210; Div. 1; Route 1, Sect. "B," Humboldt Co., Palmer & McBryde, Hooker and Lent Bldg., San Francisco, $223,555; A. J. Fairbanks, Willits, $241,341; Bates & Borland, Oakland Bank Savings Bldg., Oakland, $283,818. Noted Oct. 25.

Cal., Long Beach—See "Miscellaneous."

★Cal., Los Angeles—Bd. Pub. Wks. let contract building 92,467 sq.ft. concrete pavement with warrenite surface, cement sidewalks, granite block gutters, vitr. pipe house drains, etc., in Hoover St. from 3rd to 5th St., to Bryant & Austin, 1656 Compton Ave. About $18,587.

Cal., Oakland—Alameda Co. Supervs. received low bid building Castro Valley Rd., from T. B. Russell. About $82,861. Noted Nov. 1.

★Cal., Pasadena—City let contract paving Holly St., including 54,800 sq.ft. concrete pavement with bitulithic surface, 14,000 sq.ft. cement sidewalks, 5700 sq.ft. concrete gutter, 2190 lin.ft. cement curbs, etc., to Bryant & Austin, Inc., 1656 Compton Ave., Los Angeles, $15,967.

Cal., San Diego—City received lowest bid Nov. 6, building 30,074 ft., 6½ and 4 in. concrete pavement, 20 ft. wide, on road from city limits to Camp Kearney, from Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $108,236. Noted Oct. 25.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

New York—Empire State R.R., recently incorporated with $3,750,000 capital stock, plans to build railroad. W. Nottingham, Walnut Ave., H. S. Holden, 107 University Blk., H. S. Tenney, 820 James St., all of Syracuse, are incorporators.

Virginia — Virginia & Southwestern Ry. making surveys for line from Clinchport to Kingsport, Tenn., about 15 mi. Address W. H. Wells, ch. engr. Southern Ry., 1300 Pennsylvania Ave., Wash., D. C.

Florida — Pensacola Electric Co., West Garden St., Pensacola plans to spend $75,000 to improve its railway system. T. J. Hauton, mgr.

Ohio — Steubenville, East Liverpool & Beaver Valley Traction Co., Junction Park, Beaver Valley, Pa., recently incorporated with $4,000,000 capital stock, plans to build traction line connecting Steubenville with Pennsylvania cities. J. H. Maxwell and G. H. Faulk, Park Blvd., East Liverpool, O., and others are incorporators.

Texas—Houston & Texas Central R.R., subsidiary of Southern Pacific Texas Lines, plans to build belt line and new freight terminals in Dallas. About $1,000,000. E. B. Cushing, Houston, asst. genl. mgr.

Washington—Nitrogen Products Co., Securities Bldg., Seattle, plans to build railroad from Darrington to The Dalles, Ore., about 18 mi.

Washington—Spokane & British Columbia Ry. making surveys for railroad from Spokane to Republic, about 80 mi. F. M. Holland, Toronto, Ont., genl. mgr.

Oregon—Comn. Pub. Docks plans to extend spur line from Oregon, Washington R.R. & Navigation Co. to municipal dock at St. Johns, Portland. About $25,500. G. B. Hegardt, port engr. will prepare plans.

California — San Diego South Eastern Ry. plans to build electric railway into Mountain Empire, from Lakeside to Santa Ysabel, about 27 mi. E. J. Burns, San Diego, mgr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Illinois—(Official)—Bryant Northwestern Ry., recently incorporated, let contract building line from Bryant to Civer, about 4½ mi., to J. Marsch, Inc., Borland Bldg., Chicago.

EXCAVATION AND DREDGING

Proposed Work

Minn., Fairmont — Ditch—Martin Co. plans to establish Judicial Ditch No. 25. About $13,500. H. J. Welte, aud.

Minn., St. Cloud—(Official) — Ditches — Stearn Co. received no bids Nov. 9, building Co. Ditches No. 42 and 43. N. Thomey, co. aud. Noted Sept. 27.

Kan., Arrington — (Kingman P. O.) — Drainage—D. D. No. 1, Kingman Co., having plans prepared by J. E. Marcellus, state drainage engr., Manhattan, for system to protect 5200 acres from overflow of Delaware River.

Mo., Carrollton — Drainage — Sugarton D.D. plans to redredge 16 mi. canal during 1918, to drain 6000 acres farming land. S. P. Sorrenson, Brunswick, engr.

BIDS DESIRED

N. J., Bayonne—See "Streets and Roads."

Ga., Athens—(Official)—Drainage—Until Nov. 16, by Beaver Dam D.D. No. 1, building 13 mi. ditch along Beaver Dam Creek to reclaim 1600 acres. About $35,732. H. H. Hampton, comr. C. M. Straham, Athens, engr.

Ill., Havana—Drainage—Until Nov. 26, by Comrs. Chautauqua Drainage & Levee Dist., Mason Co., building drainage system; Sec. 1, Illinois River Levee, involving 1,461,000 cu.yd. embankment, 138,000 cu.yd. exploration trench; Sec. 3, planting willows for levee protection on 9 mi. graded bature-berm. H. Hahn, comr.

Minn., Anoka — (Official)—Ditch—Until Nov. 21, by Anoka Co., building Co. Ditch No. 59, main ditch involves 61,495 cu.yd. excav., Branch No. 4, 33,204 cu.yd.; Branches No. 5 and 6, 25,131 cu.yd., other branches and laterals, 62,956 cu.yd., etc. About $29,709. Noted Oct. 11.

Minn., Buffalo—Ditch—Until Nov. 24, by Wright Co., building Co. Ditch No. 34, involving 13,000 ft. 8-10 in. tile. About $14,312. J. A. Berg, co. aud.

Minn., Mankato—Ditches—Until Nov. 27, by Blue Earth Co., building Judicial Ditch No. 21, involving 38,655 ft. 8-32 in. tile, cost, $29,835; Judicial Ditch No. 25, 21,850 ft. 6-24 in. tile, $11,995; Judicial Ditch No. 28, 17,625 ft. 8-24 in. tile, $12,711; Judicial Ditch No. 20, 53,780 ft. 8-34 in. tile, $32,337; Judicial Ditch No. 30, 14,500 ft. 8-20 in. tile, $7081; Judicial Ditch No. 23, 19,075 ft. 8-26 in. tile, $7262. C. L. Kennedy, co. aud.

Minn., Pipestone—Ditch—Until Nov. 21, by T. A. Bailey, aud., Pipestone Co., building Judicial Ditch No. 1, involving 475,925 cu.yd. excav., 337,350 ft. 6-32 in tile, and 50 bulkheads. About $170,608.

Minn., Red Wing — See "Streets and Roads."

Kan., Salina—Drainage—Until Dec. 4, by Bd. Supervs. D.D. No. 1, Saline Co., building system involving 87,250 cu.yd. excav., etc. P. A. Tobin, 109 North Santa Fe Ave., secy.

Tex., Barstow — (Official) — Irrigation—Until Dec. 1, by Ward Co. Irrigation Dist. No. 1, building irrigation canal with structures therein and rein.-con. dam, involving 90,000 cu.yd. excav., etc. A. H. Dunlap, engr.

Ont., Chatham—Drainage—Until Nov. 20, by Township Council, building drainage system. About $20,000. W. G. McGeorge, 153 Queen St., Chatham, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Ga., Athens—Drainage—Clarke Co. let contract building Shoal Creek D. D. No. 2 to drain 450 acres, involving 6½ mi. ditch floating dipper dredge, to Moseley & Thompson, Atlanta. Noted Sept. 27.

★Minn., Redwood Falls — (Official) — Ditch—Redwood Co. let contract building Branch No. 25 of Co. Ditch No. 24, involving 16,000 ft. open ditch and 122,524 cu.yd. excav., to E. D. Barr, Herman, Neb., 12c. per cu.yd. Noted Oct. 25.

★Neb., Lincoln—(Official)—Excavation—Peterson & Devoe, attys., Sanitary Dist. No. 1, let contract excavating new channel Salt Creek, to Martin Constr. Co., Lincoln, $0.134 per cu.yd. Noted Oct. 25.

★Neb., Papillion—(Official)—Drainage—Western Sarpy D.D. let contract grading work on 7½ mi. open ditches, 2½ mi. levee in river, to Road Constr. Co., Grand Rapids, Wis. Noted Oct. 18.

★Mont., Bozeman—Irrigation—See "Miscellaneous."

★Tex., Donna—Canal—Donna Canal Co. let contract building extension to irrigating canal system, to Watts Bros., Brownsville, $100,000.

★Cal., Sacramento—See "Miscellaneous."

INDUSTRIAL WORKS

Proposed Work

Conn., New Britain—Landers, Frary & Clark, 47 Center St., soon lets contract 1-story, 50 x 317 ft. addition to factory, Elm and Commercial Sts. About $25,000. Unkelbach & Perry, 16 Main St., archts.

N. Y., Brooklyn — L. Beer Estate, 149 Remsen St., had plans prepared by W. Debus, archt., 86 Cedar St., New York City, 1-story, 110 x 219 ft. garage. About $30,000.

N. Y., Brooklyn—Foster Impvt. Co., 2027 Douglas St., had plans prepared by S. Millman & Son, archts., 1786 Pitkin Ave., 1-story, 90 x 105 ft. garage. About $25,000. S. Berenstein, pres.

N. Y., Brooklyn—A. King, 59 West St., New York City, having plans prepared by C. P. Cannella, archt., 1163 Herkimer St., 1-story, 121 x 132-ft. garage, Flushing and Waverly Aves. About $30,000.

N. Y., Buffalo — Amsterdam Radiator Co. had plans prepared by Austin Co., 14230 Euclid Ave., Cleveland, O., 1-story, 120 x 200-ft. foundry. About $50,000. H. E. Kies, 1807 Elmwood Ave., genl. mgr.

N. Y., Buffalo—Niagara Macaroni Co. had plans prepared for 3-story, 75 x 115-ft. brick factory, Niagara and Carolina Sts. About $40,000. P. Cimini, 47 Niagara St., archt.

N. Y., Hudson — Gifford-Wood Co. had plans prepared 2-story, 75 x 150-ft. addition to factory. About $30,000. M. Gifford, Second Hill, pres.

N. Y., New York—Motor Starter Corp., recently incorporated with $2,000,000 capital stock, plans to build plant. Address S. McRoberts, 32 East 64th St.

N. Y., Niagara Falls—Elderfield Hartsthorn Hardware Co., 40 Falls St., had plans prepared by Wright & Kremers, archts., 407 Gluck Bldg., 1- and 2-story, 50 x 100-ft. warehouse and tin shop. About $25,000.

N. Y., Warsaw—Warsaw-Wilkinson Co. increased capital stock from $100,000 to $200,000, and plans addition to plant here.

N. J., Irvington — Pulsometer Steam Pump Co., 485 South 21st St., had plans prepared for 1-story addition to plant. About $60,000. W. J. Berow, secy.

N. J., Red Bank—Roberts Safety Water Tube Boiler Co., Oakland St., Red Bank, having plans prepared by H. D. Best, archt., 52 Vanderbilt Ave., New York City, 1- and 2-story, 80 x 140-ft. addition to factory and 80 x 140-ft. addition to office.

Pa., Phila.—W. S. Barnes & Co., 1614 Cherry St., plans to build power house in Frankford Sect. About $75,000.

Pa., Phila.—J. D. Scott, 46th and Ludlow Sts., plans to build garage. About $29,000.

Pa., Phila.—S. Sklaroff & Son, 712 South 2nd St., soon lets contract 6-story, 22 x 45-ft. addition to storage warehouse. F. E. Hahn, 112 Chestnut St., archt.

Pa., Phila.—Westmoreland Chemical & Color Co., c/o M. Burch, 925 Chestnut St., having plans prepared 3-story, 42 x 71-ft. and 46 x 48-ft. addition to factory, 22nd and Allegheny Sts. About $25,000.

Pa., Williamsport—F. F. Gramlich having plans prepared by Bartberger & Fisher, archts., Westinghouse Bldg., Pittsburgh, 3-story, 79 x 135-ft. bakery. About $60,000.

Pa., Williamsport — Smith Printing Co., 228 Pine St., had plans prepared 3-story, 70 x 90-ft. printing plant, West 3rd and Laurel Sts. H. Smith, pres.

Pa., Williamsport—United States Rubber Co. having plans prepared for 5-story addition to factory here.

Va., Berkley—Guardian Motor Co., c/o B. C. Bownell, Norfolk, plans 1-story, 100 x 150-ft. auto factory. About $75,000. R. D. Mitchell, Paul Gale Greenwood Bldg., Norfolk, archt.

Va., Newport News — W. C. West, c/o Richmond Terminal Warehouse Co., 325 North 17th St., Richmond, having plans prepared 4-story, 100 x 300-ft. storage warehouse. About $50,000.

N. C., Elkin—Chatham Mfg. Co. plans 3 and 5 story, 80 x 300 ft. factory and steam power plant. About $200,000.

Industrial Work (Continued)

O., Akron—Ohio Ware Goods Mfg. Co., has increased its capital stock from $100,000 to $500,000, and plans to build an addition to plant.

O., Bedford—Owen Tire & Rubber Co., 1900 Euclid Bldg., Cleveland, soon receives bids for 1- and 2-story factory and power house. About $125,000.

O., Cleveland—Wicklow Constr. Co., 700 Marshall Bldg., having plans prepared for 146 x 165-ft. garage, St. Clair and Ontario Sts. About $250,000.

O., Cleveland—Willard Storage Battery Co., 131st St. and St. Clair Ave., had plans prepared by E. D. Kreech, engr., for lumber and storage building. About $150,000.

O., Cleveland—Youngstown Pressed Steel Co., recently organized with $1,000,000 capital stock, purchased plant of Sharon Steel Hoop Co. and its subsidiary, Youngstown Iron & Steel Co., and plans to build addition to same. G. F. Danielson, pres.

O., Cincinnati — (Oakley) — Cincinnati Bickford Tool Co., South St., plans addition to factory here. About $40,000.

O., Columbus—Blue Valley Creamery Co., 700 South Clinton St., Chicago, plans to build factory here. About $50,000.

O., Youngstown — Youngstown Pressed Steel Co., recently organized with $1,000,000 capital stock, has taken over fabricating department of Youngstown Iron & Steel Co., Wilson Ave. and Sharon Steel Hook Co. The new company will erect new plant along more extended lines. W. W. Galbraith of General Fireproofing Co., pres.

nd., East Chicago—George Lember Co., 1 th St. and Todd Ave., will build 2-story, x 143-ft. pattern shop and storage build- g. About $25,000. W. F. Branitsky, 64 Vest Randolph St., Chicago, archt.

Ind., Ft. Wayne—Supreme Motor Corp., 218 Union Bldg., Cleveland, plans 1-story, 100 x 400-ft. factory here. A. M. Allen Co., Euclid Bldg., Cleveland, O., archts.

Ind., Greencastle — Indiana Portland Cement Co., recently organized with $1,000,000 capital stock having plans prepared by F. L. Smith engr., 50 Church St., New York City, for cement factory near Greene-Castle Putnamville Highway.

Ind., Hammond—Keith Ry. Equipment Co., 1353 Peoples Gas Bldg., Chicago, purchased 35-acre site here and plans to build plant.

Mich., Battle Creek—Armour Grain Co., 208 South La Salle St., Chicago, soon lets contract 5-story, 68 x 155 ft., packing house. About $200,000. M. J. Morehouse, 343 So. Dearborn St., Chicago, archt.

Mich., Detroit—Detroit, Toledo & Ironton R.R. (T. Groner, Springfield, O., ch. engr.) and Grand Trunk R.R. (H. F. Safford, Montreal, Que., ch. engr.), purchased 76-acre site in down river section and plans to build freight terminals. About $1,000,000.

Mich., Detroit—C. R. Wilson Body Co. had plans prepared by Murphy & Hanford, archts., 206 New Telegraph Bldg., for 1-story plant, involving 3 units. About $150,000.

Ill., Blue Island—American Wire Fabrics Co., 201 South La Salle St., Chicago, having plans prepared by F. D. Chase, archt., 122 South Michigan Ave., Chicago, for factory. About $200,000. C. K. Anderson, secy.

Ill., Chicago—L. Bromberg, 1337 North Oakley Ave., soon lets contract 1-story, 75 x 125-ft. garage. About $30,000. A. L. Himelblau, 179 West Washington St., archt.

Ill., Chicago—Central Waxed Paper Co., 5700 Filmore Ave., plans addition to plant. About $75,000.

Ill., Chicago—Chicago & Northwestern R.R. plans car-repair shop at Washtenaw and Austin Ave. About $25,000. W. H. Finley, Chicago, ch. engr.

Ill., Chicago—G. M. Davis Regulator Co. purchased site on 25th St. and Washtenaw Ave., and plans 1-story factory. About $75,000. F. D. Chase, Chicago, engr.

Ill., Chicago — International Harvester Co., 606 South Michigan Ave., plans 3-story factory, 2600 West 31st St. About $175,000.

Ill., Chicago—S. K. Stewart Mfg. Co. purchased site of land adjoining present works and plans addition. About $225,000. S. N. Crowen, 30 North La Salle St., archt.

Ill., East St. Louis—Durbin Automatic Train Pipe Conductor Co., Pontiac Bldg., plans 265 x 605-ft factory, Bond Ave. between 20th and 21st Sts. About $150,000.

Ill., East St. Louis—East St. Louis Chemical Co. having plans prepared by Westinghouse, Church & Kerr, archts., 37 Wall St., New York City, 2-story, 500 x 700-ft. mill and warehouse.

Wis., Appleton—Northern Boiler and Structural Wks., Appleton, soon lets contract 1-story, 100 x 150-ft. addition to machine shop. Cost between $30,000 and $40,000.

Wis., Eau Claire—United States Switch Co., Eau Claire, recently organized with $1,750,000 capital stock, soon lets contract 60 x 130-ft. forge-shop addition. T. C. Hadley, genl. mgr.

Wis., Milwaukee—Milwaukee Forge and Machine Co., 224 Lake St., purchased 5-acre site at Oklahoma Ave., Manitoba St. and Chicago Northwestern R.R., and plans 75 x 150-ft. forge shop and 65 x 100-ft. machine shop. About $100,000. G. P. Pillar, pres.

Wis., Watertown—O. Biefeld Co. soon lets contract for foundry and machine-shop addition here. About $40,000. M. Liefeld, secy.

Wis., Waupun—Libby, McNeil & Libby, Union Stock Yards, Chicago, plans 1-story, 150 x 250-ft. box factory. About $100,000.

Ia., Burlington—Murray Iron Wks. Co. plans 2-story, 77 x 105-ft. steel and rein.-con. addition to plant here.

Minn., Duluth—Zenith Furnace Co., 58th Ave., West Duluth, plans to build machine shop and storage building. About $50,000.

Neb., Omaha—Myers & Laier, 424 Omaha Natl. Bank Bldg., having plans prepared by Latenser & Sons, archts., 632 Bee Bldg., 7-story, 132 x 132 ft. warehouse. About $250,000.

Neb., Omaha—Nebraska Buick Auto Co., 1912-16 Farnam St., plans 4 story addition to factory. L. Huff, mgr.

Mont., Moore—Montana Power Co., Butte, plans to build large hydro-electric power plant at foot Mystic Falls. F. M. Kear, Butte, genl. supt.

Mo., Kansas City—Atlas Cereal Co., 8th and Santa Fe Sts., plans new mill here. About $150,000.

Mo., Kansas City—Oxygen Gas Co., Traders Bldg., soon lets contract 1-story, 44 x 102-ft. factory. About $60,000. Keene & Simpson, 400 Reliance Bldg., archts.

Tex., Dallas—Perkins Dry Goods Co., 71014 Commerce St., plans 8 story factory, Commerce, Austin, Young and Market Sts. L. H. Lewis, genl. mgr.

Tex., Donna—La Blanca Sugar Co., recently incorporated with $500,000 capital stock, plans sugar mill near here. J. C. McDowell, Oil & Gas Farmers' Bank Bldg., Pittsburgh, Pa., pres.

Okla., Miami—Delta Mining Co., Kennedy Bldg., recently organized, plans concentrating plant and mill. About $75,000. W. E. Templeman, 816 Kennedy Bldg., pres.

Utah, Marysvale—Mineral Products Co. plans to rebuild potash plant, recently destroyed by fire. About $150,000. Howard S. Chappell, pres.

Wash., Seattle—Boering Aëroplane Co., Hoge Bldg., plans 2-story, 84 x 88-ft. machine shop and office building.

Wash., Seattle—Puget Sound Machinery Depot, 318 1st Ave., plans new factory here. About $1,000,000.

Wash., Seattle—Skinner & Eddy Shipbuilding Co., 1559 Railroad Ave., S., having plans prepared for 60 x 150-ft. foundry, shipways, power house and punch shops. About $1,000,000.

Wash., Tacoma—St. Paul & Tacoma Lumber Co., Tide Flats, plans to build sawmill. About $80,000.

Cal., Oakland—American Can Co., Mills Bldg., secured site of land and plans several additions to plant. About $1,000,000.

N. S., Bridgewater—Gray Marine Motor Co. plans to build plant here. About $50,000.

N. S., Comeauville—Comeau Shipbuilding Co., Ltd., plans shipbuilding plant. About $100,000. E. L. Comeau, secy.-treas.

N. S., Dartmouth—Canadian Carbonate Co., 132 Hollis St., Halifax, plans factory here. About $40,000.

N. S., New Glasgow—Nova Scotia Steel & Coal Co., Ltd., plans to build additions to factory. About $1,000,000. F. H. Crockard, genl. mgr.

N. S., Saulnierville—Acadian Shipbuilding Co. plans shipbuilding plant here. About $75,000. D. D'Entremont, Meteghan River, secy.-treas.

Que., St. Romauld—Dussault Co., Levis, had plans prepared for machine shop here. About $50,000. M. J. St. Dussault, Wolfe St., Levis, pres.

Ont., Brantford—Dominion Steel Products Co. secured site of land and plans large addition to plant here. About $100,000.

Ont., Fergus—J. Wilson & Sons, St. Andrews St., plans sawmill. About $50,000.

Ont., Hamilton—Frost Wire Fence Co. plans to build addition to plant here. About $25,000.

Ont., Strathroy—Dominion Canners having plans prepared rebuilding 2 story factory recently destroyed by fire. About $100,000.

Ont., Temiskaming—Riordan Pulp & Paper Co., 355 Beaver Hall Sq., Montreal, plans large sulphite mill and paper plant here.

Ont., Toronto—Cluff Bros. Ammunition Co., 28 Atlantic Ave., plans to rebuild its plant recently destroyed by fire. About $200,000.

Ont., Whitby—United Rubber Mfg. Co plans to build factory here. About $50,000.

Man., St. Boniface—Armour & Co., Union Stock Yards, Chicago, Ill., plans to build new meat-packing plant here. About $4,000,000.

B. C., Prince Rupert—S. E. Landry, Vancouver, plans large shipbuilding plant here. About $250,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., New York—Adams Express Co., 61 Bway., let contract 1-story, 50 x 150-ft., and 21 x 100 ft. transportation building, to J. O'Dell Whitenack, 231 West 18th St., $70,000.

★N. Y., New York—New Jersey Zinc Co., 55 Wall St., let contract for laboratory, to H. M. Krumbhaar, 68 William St., $200,000.

★N. Y., Rochester—Bridgeford Machine Tool Co., Winton Rd., let contract building addition to factory, to Crowell, Lundoff & Little, Museum Bldg., Cleveland, O., about $50,000.

★N. J., Fords—National Synthetic Co., Fords, let contract 1- and 2-story, 38 x 260-ft., 54 x 84-ft., and 50 x 76-ft. additions, to Tullis & Blanchard, 326 East 42nd St., New York City, $75,000.

★N. J., Newark—Art Metal Wks., 7 Mulberry St., let contract addition to factory to W. Nairn, 207 Maple Ave., Kearney, $25,000.

★N. J., Newark—Ferry Hat Mfg. Co., 329 North 5th St., let contract 3-story, 37 x 120-ft. addition to plant, to Miller & Sons Co., 441 East Orange St. About $33,000.

★Pa., Eddystone—Baldwin Locomotive Works, 500 North Broad St., Phila., let contract 1-story, brick, steel and concrete erecting shop at local plant, to F. W. Mark Constr. Co., Finance Bldg., Phila. About $500,000.

★Pa., Erie—Erie Forge & Mfg. Co., 15th and Cascade Sts., let contract factory outside of city limits, to J. R. Gloyd, Hippodrome Bldg., Cleveland. About $2,000,000. Noted Nov. 8.

★Pa., Phila.—White Motor Car Co., 842 East 79th St., Cleveland, let contract 1- and 2-story, 210 x 270-ft. auto service building, 20th and Erie Ave., to F. Shoemaker, Juniper and Walnut Sts. About $300,000. Noted Oct. 18.

★Pa., Phila.—W. T. White, 20th and Erie Aves., let contract 1-story, 215 x 253-ft. machine shop to Watson Eng. Co., 216 North Broad St., $130,000.

★Md., Baltimore—Bartlett-Hayward Co., Scott and McHenry Sts., let contract 1-story, 160 x 380-ft. factory, Gunpowder and Hamburg Sts., to Morrow Bros., 1201 Fidelity Bldg., $79,500.

★Md., Baltimore—Chesapeake Iron Wks., Westport, let contract, 1-story, 40 x 210 ft. erecting shop, to B. F. Bennett Bldg. Co., 123 South Howard St., about $150,000. Noted Nov. 8.

★Md., Baltimore—Poole Eng. Co., West of N. C. Ry. and north of Padonia Sta., let contract 150 x 500 ft. gun factory, to H. D. Watts Co., Garrett Bldg. About $2,000,000. Noted Oct. 11.

★Va., Newport News—Newport News & Hampton Ry. let contract 1-story, 40 x 100-ft. freight house, to Harwood & Moss, Sibley Bldg., $74,000.

Industrial Work (Continued)

★Va., Richmond—Kingan & Co. let contract 3-story packing plant to J. T. Wilson & Co., 22nd and Cary St. About $70,000. Noted Aug. 30.

★O., Cleveland—Parish & Bingham Co., West 106th St. and Madison Ave., let contract machine shop, dye and storage building, to W. I. Thompson & Son Co., 6110 Euclid Ave., $100,000.

★O., Cleveland — Pipe Machinery Co., 4907 Mead Ave., let contract 1-story, 60 x 100-ft. brick factory, Mead and Mumford Sts., to W. Dunbar Co., 8201 Cedar Ave., $30,000. Noted Nov. 8.

★O., Niles — Engel Niles Aircraft Co., Niles, let contract factory, to Hunkin Conkey Constr. Co., Cuyahoga Bldg., Cleveland, $30,000.

★Mich., Detroit — Wells Fargo Express Co., 612 Ford Bldg., let contract 2-story, 116 x 130 ft.-warehouse, to I. Misch Constr. Co., 701 East Grand Blvd.

★Ill., Champaign—Illinois Central R.R., 135 East 11th St., Chicago, let contract 1- and 2-story, 30 x 47 ft. and 40 x 253 ft. freight depot and boiler room, to A. W. Stoolman, 212 East Armory St., $50,000.

★Ill., Chicago — D. C. Cook, 15 East Washington St., let contract 5-story factory and warehouse, Michigan and South Water Sts., to E. L. Archibald Co., 11 West Washington St., $100,000.

★Wis., Madison—Four Lakes Ordnance Co., organized by interests owning Steinle Turret Machine Co., 2305 Waubesa St., let contract 1-story, 150 x 500-ft. steel, brick and rein.-con. factory, to Austin Co., 14230 Euclid Ave., Cleveland, O. Noted Nov. 8.

★Mo., Kansas City — Belfast Co., Inc., c/o W. S. Dickey, New York Life Bldg., let contract 1-story, 96 x 912 ft. warehouse, to Smith & Wodling, 302 Reliance Bldg., $40,000.

★Colo., Rocky Ford—American Beet Sugar Co. let contract for factory to C. A. Dalgren, La Junta, $60,000.

★Que., Cap de Madeleine—Canada Steamship Lines, 9 Victoria Sq., Montreal, let contract building 2 shipyards to England Constr. Co., $100,000. Noted Nov. 1.

★Que., Montreal—A. R. Whittall Can Co., Ltd., 740 Mullins St., let contract addition to factory. E. Carrigan, 318 Ballantyne Ave., N. About $25,000.

★Ont., Hamilton—Frost Wire Fence Co., Sherman Ave., let contract addition to G. Frid Constr. Co., Bank of Hamilton Bldg., $25,000. Noted Nov. 15.

★Sask., Saskatoon—J. H. Early, 1st and 23rd Sts., let contract cold-storage plant, to A. W. Cassidy & Co., 332 1st St., N., $150,000.

BUILDINGS

Proposed Work

Mass., Boston—(Roxbury)—Hospital—B. P. O. E. plan, on Parker Hill. About $250,000.

Mass., Worcester—School—St. Peters' Church plans, 135 x 135-ft., brick, Main and Ripley Sts. About $125,000. J. W. Donahue, 476 Main St., Springfield, archt.

Conn., Hartford—Fire Héadquarters — City having plans prepared by B. S. Clark, archt., 747 Main St., 3-story, 50 x 90 ft. About $100,000. H. B. Clark, pres. fire comrs.

Conn., Hartford — Jail — Hartford Co. plans, brick and steel. About $700,000.

Conn., Waterbury—Y. M. C. A. plans to build new on Old Baptist Church property. About $110,520.

N. Y., Brooklyn—School—Bd. Educ. plans new brick and stone addition, on Howard Ave. About $275,000.

N. Y., Hobart—High School—Bd. Educ. plans, 2-story. About $65,000.

N. Y., Kingston—Theater—S. Berenstein, 173 Pearl St. and A. Cohen, 225 Hurley Ave., representing syndicate having plans prepared by G. W. Betz, archt., 61 John St., for 2-story, 80 x 120-ft. brick and rein.-con., on Wall St. About $125,000.

N. Y., New York—Home—A. Freeman Foundation Home for Aged Men and Women, having preliminary plans prepared by J. H. Freedlander, archt., 681 Fifth Ave., and H. A. Jacobs, associate archt., 320 Fifth Ave., to be built at Grand Blvd. and Concourse, 166th to 167th Sts. About $350,000. S. Untermeyer, pres.

N. Y., New York—Hospital—Beth Israel Hospital, 70 Jefferson St., having plans prepared altering 7-story apartment house, Livingston Pl. and East 17th St., to be used for hospital purposes in connection with new 16-story building, which will represent an expenditure of about $1,000,000. Present project to cost about $85,000. L. A. Abramson, 220 5th Ave., archt.

N. Y., New Rochelle — Theater — E. F. Rush, 127 West 48th St., New York City, having plans prepared by De Rose & Pereira, archts., 150 Nassau St., New York City, 2-story, terra cotta. About $150,000.

N. J., Newark—School—Bd. Educ. had plans prepared by L. Sonntag, archt., City Hall, 3-story, brick, Hawkins St. About $250,000. F. H. Somner, secy.

N. J., Orange—Hospital—New Jersey Orthopaedic Hospital, Lincoln Ave. and Frankfort St. plans. About $90,000.

N. J., Red Bank—Office—See "Industrial Works."

N. J., West New York — School — Bd. Educ. having plans prepared by W. Mayer, Jr., and E. Manahan, 711 Bergenline Ave., archts., 3-story, 115 x 190-ft. brick and terra cotta, Madison to Polk Sts. About $225,000. H. G. Auf der Heide, pres.

Pa., Altoona—Y. W. C. A. having plans prepared by J. F. Schollar, archt., Altoona Trust Bldg., 3 story, 36 x 50 ft. addition to building. About $50,000. C. T. Witherow, 1540 12th Ave., secy.

Va., Richmond—School—Union Theological Seminary, Brock and Westwood Aves., Genter Park, plans 1-story. About $50,000. Nolan & Baskerville, Travelers Insurance Bldg., archts.

Ga., Atlanta — Hospital — Scottish Rite Hospital for Crippled Children plans. About $67,500. Hentz, Reid & Adler, Atlanta, archts.

O., Akron—Hotel—Park Hotel Co., Ohio Bldg., soon lets contract, 8-story, 95 x 115 ft. About $300,000. Mills & Millspaugh Co., 2nd Natl. Bank Bldg., archts. Noted Sept. 27.

O., East Akron—High School—Bd. Educ. soon lets contract. About $250,000. T. Ralph, Ridley Cottage Pl., Akron, archt.

Wash., Seattle—Office—See "Industrial Works."

BIDS DESIRED

Conn., Hartford—School—Until Nov. 19, by Bd. Educ., 48 x 79 ft. and 34 x 84 ft. additions. About $75,000. Chilton & McMahon, 36 Pearl St., archts. Noted Sept. 13.

Conn., Storrs—(Eagleville P. O.)—Infirmary, Dining Hall, Etc.—Until Nov. 18, by State Agricultural College, 1-story, 98 x 115-ft. dining hall, 1-story, 28 x 48-ft. infirmary, and 2-story cottages. About $100,000. Unkelbach & Perry, 16 Main St., New Britain, archts. Noted Nov. 8.

Pa., Johnstown—School—Until Nov. 19, by Bd. Educ. About $1,000,000. H. F. Hornbostle, 63 William St., New York City, archt.

O. Cleveland—School — (Official) — Until Nov. 19, Bd. Educ., Rockwell Ave. and East 6th St., for addition Rice School. F. G. Hogan, dir. of schools.

Ia., Straham—School—Until Nov. 30, by Bd. Educ., 2 story, 82 x 86 ft., cut stone, rein.-con. and terra cotta. About $50,000. H. H. Kayton, secy. W. F. Gernandt, 437 Keeline Bldg., archt.

Wash., Olympia—Temple—Until Dec. 3, by State Capitol Comn., Olympia. About $350,000. Wilder & White, 50 Church St., New York City, archts. Noted Oct. 11.

Ont., Barrie—Institute — Until Nov. 20, by F. Marr, secy. treas. bd. educ., for collegiate institute. Ellis & Ellis, Manning Chambers, archts.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass., Boston—(East Boston)—School—Bd. Educ. received low bids from Murphy Constr. Co., Water St., $124,000, alternate, $122,000; J. Bowen Co., 184 Dudley St., Roxbury, $125,000, alternate, $122,000; F. G. Coburn, 294 Washington St., $128,900, alternate, $126,900.

★Mass., Cambridge—High and Latin School—Bd. Educ. let contract addition, to J. B. Bryne, Inc., 162 Syndey St., Cambridge, $54,947. Noted Sept. 20.

★N. Y., Scarsdale—School—Bd. Educ. let contract, 2-story, to Stevenson & Cameron, 37 West 25th St., New York City. About $55,000. Noted Oct. 11.

★N. Y., Yonkers—School—Bd. Educ. let contract 2-story, 75 x 98-ft. addition to school No. 14, to T. & C. Miller Bros., 244 Riverdale Ave., $70,000. Noted Nov. 1.

★Pa., Ashland—School—Bd. Educ. let contract, 1-story, to A. L. Fretz & Son, 1222 Chancellor St., Phila., $112,000.

★Pa., Bloomsburg—Bank and Office—Columbia Co. Trust Co. let contract, 4-story, 24 x 120-ft., to E. H. Sheets, Ritter Bldg., Huntington, W. Va.

★O., Cleveland — Hotel — D. M. Mayer, Peoria, Ill., let contract, 7-story, concrete, on East 9th St. to W. F. Hyde Constr. Co., 1008 Scoville Ave. About $100,000.

O., Cleveland Heights — (Warrensville P. O.)—School—Bd. Educ. received low bid from H. R. Evans & Co., 1005 Columbus Savings & Trust Bldg., Columbus; about $175,805. Noted Sept. 13.

★Ill., Chicago — Hospital — Comr. Pub. Wks. let contract addition, to J. Griffiths & Sons, 112 West Adams St. About $374,900.

★Minn., Riverton—School—Bd. Educ. let contract, 2-story, 85 x 160 ft., to J. C. Nelson & Son, 17 South 6th St., Minneapolis, $115,000. Noted June 7.

★Kan., Abilene—High School—Bd. Educ. let contract, 3-story, brick and rein.-con., to Otto Peterson, Salina. About $90,000. Noted Oct. 4.

★Mo., Excelsior Springs—Hotel—Manitoba Investment Co. let contract, 5-story, brick, terra cotta, concrete and hollow tile, to Rayburn-Laird Constr. Co., 609 Waldheim Bldg., Kansas City. $150,000.

★P. E. I., Charlottetown—Home—Dominion Government Hospital Comn. let contract Soldiers' Convalescent Home, to E. E. Parkman & Son, 13 Euston St., $130,000.

★Que., Ste Anne de Beilevue—Hospital—Military Hospitals Comn., Drummond Bldg., Montreal, let contract to E. G. M. Cape & Co., Ltd., 10 Cathcart St., Montreal, $200,000. Noted Oct. 11.

★B. C., Vancouver — Depot — Canadian Northern Ry. let contract, to Northern Constr. Co., Ltd., 606 Union Bank Bldg., Winnipeg, Man. About $1,000,000.

FEDERAL GOVERNMENT WORK

Proposed Work

N. J., Little Silver — Buildings — War Dept., Signal Corps, Wash., D. C. soon lets contract for buildings in connection with additional supply depot, Camp Alfred Vail. About $250,000.

Pa., Ft. Mifflin—Buildings—Bureau Yards and Docks, Navy Dept., Wash., plans to build addition to Building No. 62, also new steel building; Specification No. 2704. About $15,000.

Colo., Towaoc—Bridge — C. Sells, comr. Indian Affairs, Wash., D. C., rejected bids opened Nov. 6, building highway bridge, Ute Mountain Indian Reservation. Noted Oct. 18.

Cal., San Diego—Buildings—War Dept., Signal Corps, Wash., D. C., soon lets contract for buildings at Rockwell Aviation Field.

BIDS DESIRED

Pa., Phila.—Heating System—Until Dec. 10, by Bureau Yards and Docks, Navy Dept., Wash., installing heating system in foundry. About $50,000.

S. C., Charleston—Power Plant Improvements—Until Nov. 26, by Bureau Yards and Docks, Navy Dept., Wash., for piping and accessories, coal bunkers, structural steel foundations, induced draft fans and miscellaneous work in connection with installation of new equipment in power plant at Navy Yard. Noted Oct. 25.

Ill., McLeansboro—Post Office — Until Nov. 29, by J. A. Wetmore, superv. archt., treas. dept. Wash.

Cal., San Francisco — Dredging — Until Nov 19, by U. S. Engr. Office, 405 Custom House, San Francisco, dredging in Stockton Channel

Cal., San Francisco — Steel Pipe — Until Nov. 2[illegible] by U. S. Engr. Office, 405 Custom House furnishing 20-in. nominal diameter steel pipe, etc.

Cal., Mare Island—(Vallejo P. O.)—Addition to Boiler Shop—Until Nov. 26, at Navy Yard, Mare Island, building addition to boiler shop, Building No. 122.

Cal., Mare Island—(Vallejo, P. O.)—Incinerator—Until Dec. 3, at Navy Yard, Mare Island, building at marine barracks, Navy Yard; Specification No. 2619.

Cuba., Guantanamo—Foam Fire Protection—Until Dec. 10, by Bureau Yards and Docks, Navy Dept., Wash. About $65,000.

Federal Government Work (Continued)

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

R. I., Newport — Extension to General Storehouse—Bureau Yards and Docks, Navy Dept., Wash., received low bids (work complete), from Darling Slade Constr. Co., Contractors Bridge, Newport, $88,151; J. Herndon, Worcester, Mass., $89,995; Whitney Co., 101 Park Ave., New York City, $90,500.

★R. I., Newport—Power Plant and Torpedo Station—Bureau Yards and Docks, Navy Dept., Wash., let contract to Westinghouse, Church, Kerr Co., 37 Wall St., New York City, $850,000.

★R. I., Newport — Wharf, etc. — Bureau Yards and Docks, Navy Dept., Wash., let contract building at Block Island, to T. A. Scott Co., Inc., 292 Pequot Ave., New London, Conn., $4850.

Conn., New London—Power House and Machine Shop—Bureau Yards and Docks, Navy Dept., Wash., received low bids, building at Naval Station (work complete), from R. H. Arnold, Wash., D. C., $186,915; Casper Ranger Constr. Co., Holyoke, Mass., $195,578; W. H. Fissell, 1328 Bway., New York City, $205,000.

★Conn., New London—Torpedo Shop and Storage—Bureau Yards and Docks, Navy Dept., Wash., let contract building at submarine base to M. F. Kelley, 51 East 42nd St., New York City, $35,000. Noted Oct. 25.

N. Y., New York — Changes to Custom House—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, from Dunn & Sheridan, 168 East 32nd St., $68,100; J. M. Knopp, 544 West 43rd St., $71,554; N. B. Smythe, New York, $74,998.

★Pa., Phila.—Electric System — Bureau Yards and Docks, Navy Dept., Wash., let contract electric system in foundry and machine shop, to Commercial Eng. Co., 1526 Sansom St., Phila., $26,919. Noted Nov. 1.

Pa., Phila.—Marine Barracks — Bureau Yards and Docks, Navy Dept., Wash., received low bids, (a) net price, (b) if building is increased in size in accordance with alternative drawings No. 323-28 to 323-30, inclusive, from Price Constr. Co., 210 Maryland Trust Bldg., Baltimore, (a) $227,000, (b) $239,000; W. W. Austine Co., Phila., (a) $237,814, (b) $245,187; W. R. Dougherty, 1608 Sansom St., (a) $238,441, (b) $246,329. Noted Oct. 18.

Pa., Phila.—Tank and Tower—Bureau Yards and Docks, Navy Dept., Wash., received low bid building steel water tank and tower (work complete), from Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, $24,650. Noted Oct. 25.

★Wash., D. C.—Cold Storage and Ice Manufacturing Plant—Bureau Yards and Docks, Navy Dept., Wash., let contract building at Hampton Roads, Va., to Cramp & Co., 329-35 South Broad St., Phila. Cost plus per cent.

★Wash., D. C.—Heating System—Bureau Yards and Docks, Navy Dept., Wash., let contract heating system for gun shop, to Mathis Bros. Co., Chicago, $48,100.

★Wash., D. C.—Machine Shop—Bureau Yards and Docks, Navy Dept., Wash., let contract building at Navy Yard, to Industrial Eng. Co., 30 Church St., New York City, $937,655. Noted Nov. 1.

★Wash., D. C.—Retaining Wall—Bureau Yards and Docks, Navy Dept., Wash., let contract building at Naval Hospital to J. W. Earley, 2131 G St., $33,730. Noted Oct. 18.

Wash., D. C.—Storage Plants for Fuel Oil—Bureau Yards and Docks, Navy Dept., received low bids building at various Navy Yards, Specification No. 2562, as follows:

San Diego, Cal.—General Heating & Ventilating Co., 198 Milwaukee St., Milwaukee, Wis., (6) $86,900, (7) $86,000, (8) $8900; J. W. Danforth Co., 70 Ellicott Sq., Buffalo, N. Y., (6) $170,786, (7) $73,974, (8) $6000; Connors Bros. Co., Inc., 64 West 88th St., New York City, (6) $120,000, (7) $126,000, (8) $5000.

Pearl Harbor, T. H.—J. W. Danforth Co., 70 Ellicott Sq., Buffalo, N. Y., (5) $56,772, (6) $344,893, (7) $143,000 (8) $12,500; Connor Bros. Co., Inc., 64 West 88th St., New York City, (5) $70,000, (6) $245,000, (7) $204,000, (8) $9500.

Puget Sound, Wash.—Connors Bros. Co., 64 West 88th St., New York City, (5) $40,000, (6) $109,000, (7) $90,090, (8) $6000; General Heating & Ventilating Co., 198 Milwaukee St., Milwaukee, Wis., (6) $76,450, (7) $102,981, (8) $9500; J. W. Danforth Co., 70 Ellicott Sq., Buffalo, N. Y., (6) $162,314, (7) $101,900, (8) $6900.

Mare Island, Cal.—Connors Bros. Co., Inc., 64 West 88th St., New York City, (6) $120,000, (7) $137,000, (8) $7000; General Heating & Ventilating Co., 198 Milwaukee St., Milwaukee, Wis., (6) $87,800, (7) $118,600, (8) $9950.

Wash., D. C.—Structural Steel—Bureau Yards and Docks, Navy Dept., Wash., received low bids structural steel for seaplane hangar, Hampton Roads, Va., Specification No. 2668, from Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., (a) $16,139, (b) $31,750, (c) $12,510, (d) $24,462; Richmond Structural Steel Co., 17th and Dock Sts., Richmond, Va., (a) $20,081, (b) $29,348, (c) $17,158, (d) $23,184; Klein Iron Wks. Co., Bellevue, O., (a) $24,697, (b) $48,500, (c) $19,297, (d) $37,850. Noted Nov. 1.

Va., Norfolk—Capstans — Bureau Yards and Docks, Navy Dept., Wash., received low bid (a) work complete, (b) alternate, from American Eng. Co., Aramango Ave. and East Cumberland St., (a) $21,000, (b) $21,800.

Va., Norfolk—Steel Tower—Bureau Yards and Docks, Navy Dept., Wash., received low bids building 200-ft. steel tower and taking down and strengthening and rebuilding existing 200-ft. steel tower at Navy Yard, from Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, $21,350; J. E. Ogden, 147 Cedar St., New York, $23,051. Noted Oct. 25.

★Va., Port Royal—Repairs to Wharf—Bureau Yards and Docks, Navy Dept., Wash., let contract, to P. D. Hay, 29 Bee St., Charleston, S. C., $7500.

★W. Va., Charleston — Electric Power Distributing System — Bureau Yards and Docks, Navy Dept., Wash., let contract to G. E. Eng. Co., Inc., 417 Canal St., New York City, $26,711.

★W. Va., Charleston—Sewerage System —Bureau Yards and Docks, Navy Dept., Wash., let contract installing at Naval Sta., to Warren-Moore & Co., Columbia Trust Bldg., Phila., $13,887. Noted Nov. 1.

N. C., Burlington—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids Nov. 5, from W. H. Stillwell, Savannah, Ga., $55,208; A. Blair, Hill Bldg., Montgomery, Ala., $55,426; J. N. Boston, Marion, Ky., $55,722. Noted Oct. 4.

★S. C., Charleston — Steel Towers—Bureau Yards and Docks, Navy Dept., Wash., let contract building 300 ft. steel tower and reinforcing 3 existing steel towers at Navy Yard, to Aetna Steel Products Co., 30 Church St., New York City, $22,450. Noted Oct. 25.

★Fla., Miami—Dredging and Filling—Bureau Yards and Docks, Navy Dept., Wash., let contract to Bowers Southern Dredging Co., Miami. About $50,000. Noted Oct. 25.

N. D., Elbowoods—Building — C. Sells, comr. Indian Affairs, Wash., D. C., received low bid from Johnston Constr. Co., Fargo, N. D., $14,086. Noted Oct. 18.

★Wash., Puget Sound—(Bremerton P. O.) —Air Cooled Refuse Burner—Bureau Yards and Docks, Navy Dept., Wash., let contract, to Seattle Boiler Works, 1132 West 45th St., Seattle, $8990.

★Cal., Mare Island—(Vallejo, P. O.)—Ice Making and Refrigerating Plant—Bureau Yards and Docks, Navy Dept., Wash., let contract to Vulcan Iron Wks., 1849 Kearny St., San Francisco, $23,850.

Cal., Mare Island—(Vallejo P. O.)—Bureau Yards and Docks, Navy Dept., Wash., received low bids building structures for submarine base, Specification No. 2660, from Clinton Constr. Co., 140 Townsend St., San Francisco, (a) $86,250, 90 days, (b) $10,900, 5 days, (c) $26,500, (d) $5250; H. J. & C. Christensen, 565 16th St., Oakland, (a) $89,000, 100 days, (b) $500, (c) $34,200, 10 days, (d) $4840; Tibbetts Pacific Co., 16 California St., San Francisco, (a) $93,900, 90 days, (b) $15,600, 10 days, (c) $22,500, (d) $4900. Noted Oct. 25.

★P. R., El Cayey — Building — Bureau Yards and Docks, Navy Dept., Wash., let contract (work complete) to Hamilton & Chambers, 29 Bway., New York City, $79,780. Noted Nov. 1.

MISCELLANEOUS

Proposed Work

Fire Escapes—Dover, N. J.—(Official)—Bd. Educ., at Northside School, rejected bids opened Oct. 30, for fire escapes and alterations to South Side School. C. H. Benedict, secy. Noted Oct. 18.

Park Improvements—Passaic, N. J.—City plans to spend $15,000 to improve public parks. Colvin R. Wise, city engr.

Shipping Terminal—South Amboy, N. J.—State Bd. Commerce and Navigation plans to build shipping terminals on Raritan River, near South Amboy. J. S. Smith, state house, pres.

Pier—Chester, Pa.—Federal Steel Foundry Co., Delaware and Reaney Sts., applied to Bd. Comrs. of Navigation for permission to build new pier on Delaware River, near Reaney St.

Amusement Park — Taylorsville, Pa.—City plans to build on Delaware River. About $25,000.

Subway—Wesleyville, Pa.—Pub Serv. Comn. issued order for abolition of grade crossings, by building subway. New York Central R.R. (G. W. Kittredge, ch. engr.), New York, will apropriate $111,707 toward cost; New York, Chicago, & St. Louis R.R. (E. E. Hart, ch. engr.) Cleveland, $25,162; East Erie Commercial R.R., $73,542; Erie Co., $15,000; Mill Creek Twp., $10,000, and Wesleyville, $2500.

Dry Dock—Tampa, Fla.—Tampa Dock Co., Tampa, plans to build new sectional floating dry dock, 4000-ton capacity. About $600,000.

Subway—Ashtabula, O.—(Official)—City voted $140,000 bonds to build subway at Center St. Cost, $401,700. New York Central R.R., (G. W. Kittredge, ch. engr.), Grand Central Terminal, New York City and Pennsylvania Lines West of Pittsburgh, (T. Rodd, ch. engr., Pittsburgh), will appropriate 65% of cost. L. A. Amsden, city engr. Noted Oct. 4.

Levees—Modale, Ia.—Utman Farm Co. plans to spend $40,000 to build levees on Crow Island, southwest of Modale, to protect 1500 acres farm and pasture lands from backwaters of Missouri and Soldier Rivers.

Dam—Grand Junction, Colo.—Dirs. Redlands Power & Irrigation Co., 60 Wall St., New York City, plan to build rein.-con. dam to replace present wooden structure at Redlands, near Grand Junction. F. L. Lucas, pres.

Subway—Portland, Ore.—City plans to build, at intersection of 11th St. P. H. Dater, city engr.

BIDS DESIRED

Dam—Barstow, Tex. — See "Excavation and Dredging."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Duct Line—New York, N. Y.—Pub. Serv. Comn. received low bids duct line for 7th Ave-Lexington Ave. Rapid Transit R.R., consisting of 32 ducts extending under Westchester Ave. and Bronx River (Bronx Boro.), from Underpinning & Foundation Co., 290 Bway., $47,113; 198 Bway. Constr. Co., 4925 Bway., $50,250; H. E. Fox Constr. Co., 81 East 125 St., $54,570. Noted Oct. 25.

Playground—New York, N. Y.—Dept. Parks received low bids improving playground on west side of 1st Ave., from 67th to 68th St., from T. Crimmins Contg. Co., 444 East 69th St., $19,999; F. Del Balso, 1481 Hoe Ave., Bronx, $20,116; Natl. Excav. & Foundation Co., 103 Park Ave., $21,998. Noted June 14.

★Coal Bunkers — Rochester N. Y. — Rochester Ry. & Light Co., 34 Clinton St., let contract to Turner Constr. Co., 242 Madison Ave., New York City, $75,000.

★Piers—Baltimore, Md.—Baltimore & Ohio R.R. let contract rebuilding Piers Nos. 8 and 9, 150 x 950 ft., to McLean Contg. Co., foot East Fort Ave., and Empire Eng. Co., 723 Munsey Bldg.

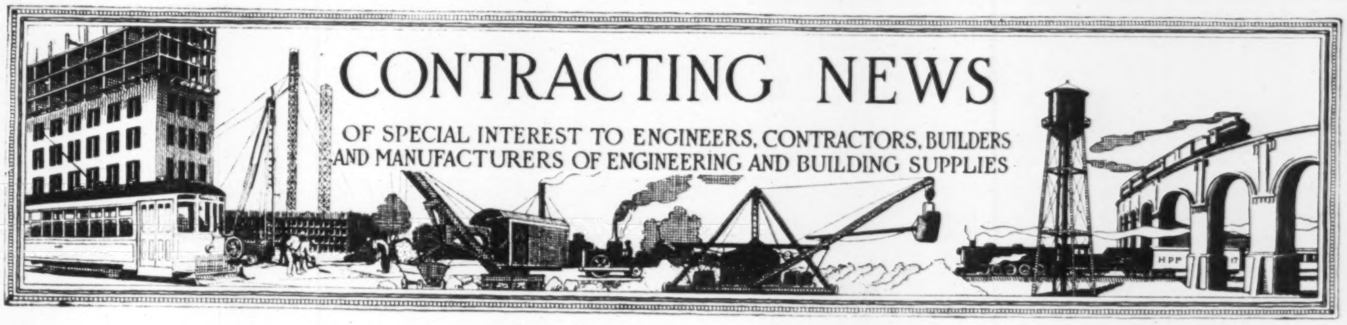
★Flume—Bozeman, Mont.—Gallatin Co. let contract building rein.-con. flume on high line canal to D. Anderson, Bozeman, $24,750.

★Incinerating Plant—Kansas City, Mo. —(Official)—City let contract Grand Ave. and Missouri River Front, to Decarie Incinerator Co., c/o Kansas City Eng. Co., Scarritt Bldg., $129,957.

★Gas Tank—Fresno, Cal.—Pacific Gas & Electric Co. let contract to Duncanson-Harrelson Co., Chronicle Bldg., San Francisco, $34,980.

Seawall, etc.—Long Beach, Cal.—City Council received only bid building combined rein.-con. sea wall, sidewalk, center wall, end walls, staps, lighting standards, sheridized conduits and vitr. pipe sewers on Seaside Blvd., from Mercereau Bridge & Constr. Co., Pacific Electric Bldg., Los Angeles, $76,400. Noted Sept. 20.

★Toe Wall, etc.—Sacramento, Cal.—San Joaquin D.D. let contract building timber toe wall, also for material except cement, to build 4-in. plain concrete revetment, to Duncanson-Harrelson Co., Chronicle Bldg., San Francisco, $20,451.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 47 to 50 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Nov. 26.	Euclid, O.	Nov. 8
Nov. 26.	Winnipeg, Man.	Nov. 8
Nov. 26.	Winnipeg, Man.	Nov. 15
Nov. 26.	York Twp., Ont.	Nov. 15
Nov. 27.	Akron, Ohio	Nov. 13
Nov. 27.	Tonawanda, N. Y.	Nov. 22
Nov. 27.	Manasquan, N. J.	Nov. 22
Nov. 27.	New York, N. Y.	Nov. 22
Nov. 30.	Keithsburg, Ill.	Nov. 22
Dec. 3.	Winnipeg, Man.	Nov. 8
Dec. 5.	Red Bank, N. J. Adv. Nov. 22.	Nov. 22

SEWERS

Nov. 23.	Independence, Mo.	Nov. 8
Nov. 26.	Oil City, Pa.	Nov. 1
Nov. 26.	Estherville, Ia.	Nov. 22
Nov. 27.	Jersey City, N. J.	Nov. 22
Nov. 27.	Trenton, N. J.	Nov. 22
Nov. 28.	Jersey City, N. J.	Nov. 22
Dec. 1.	Ozark, Ala.	Nov. 22
Dec. 10.	Lake Andes, S. D.	Nov. 22

BRIDGES

Nov. 27.	Milford, Del.	Nov. 15
Dec. 1.	Dayton, Ohio	Nov. 15
Dec. 3.	Akron, O.	Nov. 22
Dec. 3.	Laurel, Miss.	Nov. 22
Dec. 4.	West Palm Beach, Fla.	Nov. 8
Dec. 10.	St. Augustine, Fla.	Nov. 15
Dec. 12.	New York, N. Y.	Nov. 22

STREETS AND ROADS

Nov. 26.	Texarkana, Tex.	Nov. 22
Nov. 24.	Charleston, W. Va.	Nov. 8
Nov. 27.	Rogersville, Tenn.	Nov. 15
Nov. 27.	Bayonne, N. J.	Nov. 15
Nov. 27.	Oregon	Nov. 22
Nov. 27.	New Ulm, Minn.	Nov. 22
Dec. 1.	Columbus, Ohio	Nov. 15
Dec. 3.	Scottsboro, Ala.	Nov. 15
Dec. 3.	Washington	Nov. 22
Dec. 3.	Stanberry, Mo.	Nov. 22
Dec. 4.	Tuscumbia, Ala.	Nov. 8
Dec. 4.	Columbus, Neb.	Nov. 15
Dec. 5.	Red Wing, Minn.	Nov. 15
Dec. 5.	Santa Ana, Cal.	Nov. 22
Dec. 11.	St. James, Minn.	Nov. 22
Dec. 11.	Granite Falls, Minn.	Nov. 22

EXCAVATION AND DREDGING

Nov. 24.	Buffalo, Minn.	Nov. 15
Nov. 26.	Havana, Ill.	Nov. 15
Nov. 27.	Mankato, Minn.	Nov. 15
Nov. 27.	Rockwell City, Ia.	Nov. 22
Dec. 1.	Barstow, Tex.	Nov. 15
Dec. 1.	Montevideo, Minn.	Nov. 22
Dec. 1.	Greenfield, Ind.	Nov. 22
Dec. 4.	Salina, Kan.	Nov. 15
Dec. 6.	Marion, O. Adv. Nov. 8.	Nov. 8

BUILDINGS

Bids Close		See Eng. News-Record
Nov. 25.	Middletown, Mass.	Oct. 4
Nov. 26.	Philadelphia, Pa.	Nov. 22
Nov. 26.	Corinth, Ia.	Nov. 22
Nov. 27.	Lafayette, Ind.	Nov. 22
Nov. 27.	Harrisburg, Pa.	Nov. 15
Nov. 30.	Strahan, Ia.	Nov. 15
Dec. 1.	Grand Mound, Wash.	Nov. 22
Dec. 1.	Norfolk, Va.	Sept. 13
Dec. 1.	Glenville, W. Va.	Nov. 8
Dec. 3.	Olympia, Wash.	Nov. 15
Dec. 8.	Suffern, N. Y.	Nov. 22
Dec. 10.	East Cleveland (Cleveland P. O.) O.	Nov. 22
Jan. 1.	Wichita, Kan.	Nov. 22

INDUSTRIAL WORKS

Nov. 26.	Linden, N. J.	Nov. 22

FEDERAL GOVERNMENT WORK

Nov. 24.	Power Dry Houses—Indian Head, Md.	Nov. 22
Nov. 25.	Addition to Filtration Plant—Rock Island, Ill.	Nov. 22
Nov. 26.	Locomotive Dry Dock Cranes—Wash., D. C.	Nov. 22
Nov. 26.	Warhead Storage — Newport, R. I.	Nov. 22
Nov. 26.	Dry Dock Crane, Wash., D. C.	Oct. 25
Nov. 26.	Steel Towers—Washington, D. C.	Nov. 1
Nov. 26.	Electric Duct System — Charleston, W. Va.	Nov. 8
Nov. 26.	Radio Building—New Orleans, La.	Nov. 8
Nov. 26.	Reservoir — Philadelphia, Pa.	Nov. 8
Nov. 26.	Electric Generating System, Ft. Stanton, N. M. Adv. Nov. 8.	Nov. 8
Nov. 26.	Power Plant Improvements—Charleston, S. C.	Nov. 15
Nov. 26.	Addition to Boiler Shop—Mare Island (Vallejo P. O.) Cal.	Nov. 15
Nov. 26.	Fencing—Lake Denmark, N. J.	Nov. 22
Nov. 27.	Post Office—Chapel Hill, N. C.	Oct. 25
Nov. 27.	Stone—New Orleans, La. Adv. Nov. 1 and 8.	Nov. 1
Nov. 28.	Post Office — Bellefourche, S. D.	Oct. 11
Nov. 29.	Post Office—McLeansboro, Ill.	Nov. 15
Nov. 30.	Post Office—Buffalo, Wyo. Adv. Nov. 1.	Nov. 1
Nov. 30.	Machinery, etc. — Cincinnati, O. Adv. Nov. 1 and 8.	Nov. 1
Nov. 30.	Power House and Machine Shop — New London, Conn.	Nov. 22
Dec. 3.	Incinerator — Mare Island (Vallejo P. O.) Cal.	Nov. 15
Dec. 3.	Dredging—Melville, R. I.	Nov. 22
Dec. 3.	Pattern Shop — Washington, D. C.	Nov. 22
Dec. 5.	Post Office—Decatur, Ala.	Nov. 1
Dec. 5.	Bulkhead — New Orleans, La.	Nov. 8
Dec. 10.	Foam Fire Protection — Guantanoma, Cuba	Nov. 8
Dec. 10.	Heating System — Phila., Pa.	Nov. 15
Dec. 10.	Refrigerating Apparatus, etc.—Washington, D. C. Adv. Nov. 22.	Nov. 22
Dec. 10.	Heating System—Philadelphia, Pa.	Nov. 22
Dec. 17.	Post Office—Denton, Tex.	Nov. 8
Dec. 18.	Laterals — Torrington, Wyo.	Nov. 1
Dec. 27.	Post Office — Alexandria, La.	Nov. 22

MISCELLANEOUS

Nov. 28.	Portland Cement—Minneapolis, Minn.	Nov. 22
Dec. 3.	Steam Pipe and Fittings—San Jose, Cal.	Nov. 22

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., Coxsackie—Village election soon to vote on $30,000 bond issue to build storage reservoir.

Ga., Dublin—City election Jan. 4, to vote on $15,000 bond issue to install water and sewer mains. M. J. Gutyon, supt. Noted Oct. 18.

O., Canton—City plans to drill 12 new wells. About $34,000. L. B. Ohliger, supt. Noted July 5.

O., Woodville—(Official)—City defeated $55,000 bonds to install water-works. Noted Sept. 27.

Mich., Highland Park—City voted $217,686 bonds to build water-works.

Mich., Lakeview — (Official) — City rejected bids, opened Nov. 15, for water-works, including steel tank and tower, motor and pump. Noted Oct. 25.

Wis., Tomahawk—(Official)—City postponed improving water-works system until spring owing to high cost of material and labor. Noted Nov. 8.

Kan., Ogden—City election Dec. 3 to vote on $12,000 bonds to build water-works. Noted Oct. 25.

Kan., Winfield — City plans election to vote on $129,000 bond issue to build water-works. J. M. Bradley, city engr.

Mont., Billings—Yellowstone Co. Comrs. plans to build water system. About $11,320.

Mo., Kansas City—City plans to issue $500,000 bonds to build additional pumping station. C. H. Hill, city engr.

Tex., San Angelo—San Angelo Water, Light and Power Co. plans to build concrete dam to secure water from spring of South Concho River and Dove and Spring Creeks, across main Concho River; 225 ft. long, 15 ft. high, width at base 10 ft., and at top 4 ft. About $12,500.

Okla., Altus—City election Dec. 4 to vote on $80,000 bond issue to improve water-works. S. E. Hickman, mayor. Noted May 31.

Okla., Oilton—City plans to build new water system.

Okla., Okmulgee—City voted $535,000 bonds to build water-works and sewer extensions.

Okla., Sulphur — City plans election to vote on $10,000 bond issue to build water-works.

N. M., Albuquerque—City plans to issue $400,000 bonds to purchase and improve water system.

Ariz., Bisbee—City plans election to vote on $375,000 bond issue to build water works and electric-light plant. J. C. McNeisch, city engr.

Wash., Pasco — Municipal Ownership League, plans election to vote on $125,000 bond issue to build new water-works. Noted Sept. 13.

Wash., Seattle—City had plans prepared building water mains in 41st Ave., S. W., from West Charleston to West Hanford St. About $12,847. A. H. Dimock, city engr.

Ore., Richland—City voted $20,000 bonds to build water-works.

Cal., Filmore — City having plans prepared by Olmsted & Gillelen, engrs., Hollingsworth Bldg., Los Angeles, for water system; $60,000 bonds voted for work. Noted Aug. 16.

Water-Works (Continued)

Cal., Inglewood—City having plans prepared by Olmsted & Gillelen, engrs., 1112 Hollingsworth Bldg., Los Angeles, for water-works.

Cal., Redding—City having plans prepared for water system. E. B. House, city engr.

Cal., Stockton—Holt Mfg. Co. plans to build water-tower, also install piping system and other fire-fighting equipment in its plant here. About $50,000.

Ont., Winona—See "Buildings."

BIDS DESIRED

N. Y., Tonawanda—(Official)—Until Nov. 27 (readvertisement), by U. W. Suison, city clk., laying intake pipe in Niagara River. About $11,000. B. Hinkey, city engr. Noted Oct. 18.

Ill., Keithsburg — (Official) — Until Nov. 30, by city, rebuilding water system W. L. Mellinger, city clk. C. F. Sturtevant, Holdrege, Neb., engr.

Ariz., Bisbee—See "Industrial Works."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Neb., Pender—(Official)—City let contract building water-works and electric-light plant, to Wright Electric Constr. Co., Freemont, $19,989. Noted Nov. 1.

★Mo., Kansas City—City let contract, about 600 tons c.i. water pipe, to Cast Iron Pipe & Foundry Co., 122 South Michigan Ave., Chicago, $52 per ton.

★Mo., Moberly—City let contract for water-works and additional wells, to Layne & Bowler, 400 Inter-State Bldg., Kansas City, Mo., $30,000. Noted Nov. 1.

★Tex., Galveston — (Official)—City let contract repairing Alta Loma pumping station, to J. W. Zempeer, Galveston. Percentage basis. Noted Oct. 25.

SEWERS

Proposed Work

Mass., Boston — City plans to improve main trunk line sewers in eastern section, including Shepherd sewerage system, to cost $125,000, and Franklin Park sewer, $100,000. E. F. Murphy, comr. pub. wks.

Mass., Fitchburg—City plans to build sewers in several streets. About $23,000. G. Chase, city engr.

N. Y., Port Jefferson—Village had plans prepared for sewage disposal plant.

N. J., South Orange—Township plans to join with other municipalities and build sanitary trunk sewer and sewage disposal plant. E. R. Arcularius, clk.

Pa., Johnstown — (Official) — City voted $500,000 bonds to build sanitary sewerage system. J. R. Crissey, city engr. Noted Oct. 18.

Pa., New Castle—City plans to build sewage disposal plant. C. H. Milholland, city engr.

Pa., Vandergrift — City had plans prepared for new sewage disposal plant. About $40,000. Baum-Werden Co., engrs.

S. C., Columbia—City plans to build sanitary sewers along Smith's Branch and Columbia Canal. Cost between $40,000 and $50,000. T. K. Legare, city engr. Noted Oct. 4.

Ga., Dublin—See "Water-Works."

Tenn., Morristown—(Official)—City having plans prepared extending sewers in south side. About $15,000. E. C. Brown, city engr. Noted Nov. 8.

Ky., Shelbyville — City voted $15,600 bonds to extend sewerage system. Noted Aug. 20.

O., Columbus—City plans sewer in Walhalla Rd. between High St. and Indianola Ave. About $10,000. H. Maetzel, city engr.

O., Toledo—(Official)—City voted $2,800,000 bonds for sewers and pumping plant; contracts for $700,000 worth of work will be let about Feb. 15. H. C. McClure, city engr. Noted Sept. 13.

O., West Park—(Official)—City lets contract in January, building sewers. About $30,000 F. Feuchter, clk. Noted Nov. 1.

Ind., Frankfort—City plans to build storm sewer in West Washington St. R. H. Boynton, city engr.

Ill., Maywood—(Official)—Sanitary Dist. of Chicago having plans prepared for sludge plant with appurtenances for community of 30,000 people, including small sewage pumping station. About $400,000. J. McGillen, Karpen Bldg., Chicago, clk. Noted Nov. 1.

Ia., Eagle Grove—City having plans prepared by C. H. Currle, engr., Webster City, building sewerage system.

Ia., Red Oak—(Official)—McGregor Subdivision Co., Cedar Rapids State Bank Bldg., Cedar Rapids, lets contract about Feb. 1, laying out 46-acre subdivision, including sewers, water-works, gas mains, paving, and building sidewalks. H. R. Greene, 2nd St. and 1st Ave., Cedar Rapids, engr. Noted Nov. 1.

Minn., St. Paul—City plans sewers in Fenton St. near Kentucky St., Baldwin St., between Walpole and St. Clair Sts.; Cretin Ave. near Randolph St.; Winter St near Capitol Blvd. H. W. Austin, purch. agt O. Claussen, city engr.

Tex., Princeton—City plans election to vote on $50,000 bond issue to build sewerage system.

Colo., Colorado Springs — City plans to build West End sewer extension. About $25,000. F. F. Mallon, city engr.

Ariz., Tucson—City plans to build storm sewers along 6th Ave. and 8th St C. F. Von Petersdorff, city engr.

Ore., Portland—(Official)—City rejected bids for sewer in Klickitat St., also East 65th St. sewerage system. Noted Sept. 27.

Ont., London—City having plans prepared for sewage pumping system for West London. About $150,000. H. A. Brazier, city engr.

Ont., Winona—See "Buildings."

BIDS DESIRED

N. J., Jersey—(Official)—Until Nov. 27, by City, building sewer in Division St., from 8th to 9th St.; in Magnolia Ave. from a point about 430 ft. south of Tonnele Ave.; in Tonnele Ave. to Pavonia Ave. F. A. Dolan, clk. C. A. Van Kuren, city engr.

N. J., Manasquan—(Official)—Until Nov. 27, by R. D. Bush, boro. clk., building additions to sewerage system, consisting of pipe sewers, manholes, Y branches, etc. G. R. Moore, engr.

Ia., Estherville—Until Nov. 26, by M. G. Egbert, city clk., building sanitary sewers involving about 5690 ft. 8-10-in. pipe, together with manholes and flush tanks.

S. D., Lake Andes—Until Dec. 10, by City building sewerage system and sewage disposal plant, involving 4200 ft. 12-in. main sewer, septic tank, sludge bed, and sand filter bed. A. A. Loft, 1st Natl. Bank Bldg., Yankton, engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn—L. H. Pounds, boro. pres., let contract building sewers and sewage pumping station in Flatlands Ave., to J. F. Cogan Co., Woolworth Bldg., New York City, $421,673. Noted Nov. 1.

N. Y., New York—M. E. Connolly, boro. pres. (Queens Boro.), received low bids building sewers in Maspeth Ave. from Rust St. to Clermont Ave. and in Clermont Ave. from Maspeth Ave. to Grand St., from J. J. B. La Marsh, Inc., 26 Court St., Brooklyn, $20,906; R. Carvel, 401 West 59th St., New York City, $20,143; J. Broderick, $21,154.

Roosevelt Ave. from Alburtis Ave. to 51st St.; Gunther St., from Alburtis Ave. to 51st St., and Havermeyer St. from Alburtis Ave. to 51st St., from Green Contg. Co., 734 Verona Ave., Astoria, $10,699; J. J. Johnson, 1045 Forest Ave., Brooklyn, $11,870; E. W. Fitzpatrick, 128 3rd Ave., Brooklyn, $12,507.

Matthew Pl. from Forbes to Dunsing St., Dunsing St. from Matthew Pl. to Mareton Ave., from Kenmore Contg. Co., 6102 18th Ave., Brooklyn, $47,068; Peace Bros., 20 Main St., Flushing, $52,323; Stanhope Contg. Co., 404 Stanhope St., Brooklyn, $57,054.

North Villa St. from Ridgewood to Jamaica Ave.; North Conchran Ave. from Ridgewood to Jamaica Ave.; North Curtis Ave. from Ridgewood to Jamaica Ave., from J. H. Johnson, 1045 Forest Ave., Brooklyn, 8863; E. W. Fitzpatrick, 128 3rd Ave., Brooklyn, $10,166; C. Petracca, $10,483. Noted Nov. 8.

★O., Cleveland—City let contract building Sect. 5, south intercepting sewer, from Washington Park to sewage disposal plant in Newburg Heights, to Connelly Constr. Co., 439 Arcade, $180,785.

★O., Lorain—(Official)—City let contract building sanitary sewers in West 28th St., from Lexington to Oakdale Ave.; Oakdale Ave. from West 27th to West 28th St.; East 26th St. from Elyria to Apple Ave.; Clifton Ave. from East 35th to East 36th St.; to T. Trifiletti, Lorain Noted Nov. 8.

★Wis., Madison—City let contract building about 3 mi. of 6-12 in. sewers, to J. R. Cullinane, 618 West Dayton St., $39,177.

★Wis., Whitefish—City let contract laying 12,050-ft. storm sewer to Wisconsin Drainage Co.

★Ia., Sioux City—(Official)—City let contract building North Riverside sewerage system, including pumping station and outfall beds, to Ward & Weighton, 516 Davidson Bldg., about $34,000. Noted Nov. 8.

Cal., Long Beach—City received lowest bid building sewers in State, Locust and other streets, vitr. clay pipe with brick flush tanks and manholes, rein.-con. pumping station, centrifugal pumps, motors, iron frames and covers, automatic flushing siphons, etc., from J. Kennedy, Washington Bldg., Los Angeles, $56,250.

BRIDGES

Proposed Work

Minn., Minneapolis—Hennepin Co. Comrs. rejected bids building 800-ft. bridge over Minnesota River on Lyndale Ave. Noted Oct. 25.

Kan., Wichita—See "Streets and Roads."

Okla., Tecumseh — See "Streets and Roads."

Ariz., Tucson—Pima Co. having plans prepared by T Haddock, state engr., Phoenix, for building bridges over Santa Cruz and Sahuarita Rivers.

BIDS DESIRED

N. Y., New York—Until Dec. 12, by D. Mathewson, boro. pres. (Bronx Boro.), building bridges and approaches, regulating, reregulating, paving and repaving Gun Hill Rd. between Webster Ave. and White Plains Rd., granite block, sand foundation.

N. J., Red Bank—(Official)—Until Dec 5, by Bd. Freeholders, Monmouth Co., Freehold, building Hubbards Bridge. C. M. Wyckof, dir. Advertised in this issue Noted Nov. 1.

Miss., Laurel—Until Dec. 3, by Jones Co., building 120-ft. steel bridge, 14.8-ft. roadway. H. B. Graves, clk.

O., Akron—(Official)—Until Dec. 3, by Bd. Comrs. Summit Co., building superstructure of Waterloo Bridge over Canal Tract 11, Coventry Twp. L. Kauffman clk.

Oregon—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Conn., Canaan—(North Canaan)—(Official)—State Highway Comr., Hartford, let contract building rein.-con. arch bridge over Houstanoic River, between North Canaan and Salisbury Twps., to L. J. Sieling, 171 Madison Ave., New York City, $35,000

★Minn., Carver—City let contract steel work for new bridge over Minnesota River to Franklin Bros. Bridge & Constr. Co., 911 Metropolitan Life Bldg., Minneapolis, $15,000.

★Tex., Dallas — Dallas Southwestern Traction Co. let contract building steel bridge over Trinity River, to Missouri Valley Bridge & Iron Co., Leavenworth, Kan., $63,300. Noted Oct. 11.

★Okla., Tulsa—Tulsa Co. Comrs. let contract building 13 bridges and culverts to Froebe-Gray Constr. Co., Muskogee, $11,694

STRUCTURAL STEEL WORK

Proposed Work

N. J., Camden—See "Industrial Works."

Ida., Caldwell—See "Buildings."

BIDS DESIRED

Miss., Laurel—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Camden—See "Industrial Works"

★Minn., Carver—See "Bridges."

★Tex., Dallas—See "Bridges."

REINFORCED CONCRETE

Proposed Work

N. Y., New York—See "Industrial Works"

O., Cleveland—See "Miscellaneous."

Minn., Alexandria—See "Buildings."

Tex., San Angelo—See "Water-Works."

Ariz., Jerome—See "Buildings."

Cal., Long Beach—See "Miscellaneous."

Reinforced Concrete (Continued)

BIDS DESIRED

Oregon—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Conn., Canaan**—(North Canaan)—See "Bridges."

★**Kan., Lawrence**—See "Buildings."

★**Pa., Phila.**—See "Miscellaneous."

Cal., Long Beach—See "Sewers."

STREETS AND ROADS

Mass., Boston—(Official)—Bd. Street Comrs. plan to widen Crescent Ave., Dorchester. J. J. O'Callaghan, secy.

N. Y., Buffalo—City Council plans to pave Zenner St. from Ferry St. to Seajaquada Creek. G. H. Norton, city engr.

N. Y., Huntington—Town plans to improve roads in Huntington Village and station with concrete, cost $27,000; improving highways with cinders, $7000; improving macadam road between Northport and Cold Springs Harbor, $20,000.

N. J., Newark—Bd. Freeholders Essex Co. plans to pave following roads with granite block on concrete base: Bloomfield Ave. from Montclair-Verona line through Verona, Caldwell, North Caldwell and West Caldwell to Dutch lane, cost, $390,000; Avondale Rd., Nutley, from Washington Ave. to Avondale bridge, $21,300; Tuger St., Belleville, from Washington Ave. to Belleville bridge, $20,300, with bituminous concrete, Stuyvesant Ave., Irvington, from Newark line to Union Co. line, $95,200; Gregory Ave., West Orange, from Luddington Rd. to Mt. Pleasant Ave., $75,800; Watchung Ave., Montclair and Bloomfield, from Upper Montclair Ave., Montclair, to East Passaic Ave., Bloomfield, $77,600.

N. J., Newark—(Official)—Bd. Street & Water Comrs. soon lets contract paving Vail St. from Marion to Abbottsford Ave.; High St., from Warren St. to Boyden Pl.; South St. from Pacific to Dawson St.; North Munn Ave. from South Orange Ave. to East Orange line; Central Ave. from Plane to Burnet St.; Abbottsford Ave. from Sanford Ave. to East Orange line; Sunset Ave. from South Orange Ave. to Abinger Pl.; Mulberry St. from Center to Market St.; Meeker Ave. from Elizabeth to Freylinghuysen Ave.; Comes Alley from Market to Bank St.; Salem St. from South Orange Ave. to Rockland Terrace; Wheeler Point Rd.; Chadwick Ave. from Jeffrey Pl. to Custer Ave.; Mapes Pl. from Mapes to Shephard Ave.; Stengel Ave. from Elizabeth Ave. to Hunterdon St. M. R. Sherrard, city engr.

N. J., New Brunswick—Bd. Freeholders Middlesex Co. plans to pave Parlin Rd. from Millers Corners, Sayreville, to South Amboy.

N. J., Ocean City—City plans to extend 55th St. across tracks of West Jersey & Seashore Ry. to form portion of ocean boulevard from New York to Cape May, section of which is now being constructed between Ocean City and Sea Isle City.

N. J., Pompton Lakes—Boro. Council passed ordinance to improve Adrian St. and Lenox and Passaic Aves.

Pa., Greensburg—Westmoreland Co. soon receives bids for building 4-mi. road north and south of Irwin. County and township will each pay one-half of cost.

Pa., Johnstown—(Official)—City voted $200,000 bonds to pave streets. J. R. Crissey, city engr. Noted Oct. 18.

Pa., McKeesport—City plans to open, widen and extend Bowman Ave. from Elm St. to 5th Ave., and Maple Alley from Stewart to Brom St. J. M. Smith, city engr.

Pa., New Brighton—(Official)—Boro. passed ordinance to pave, grade and curb 13th St. between 6th Ave. and Penn Ave. and 6th St. between 3rd Ave. and 6th Ave., vitr. block. H. T. Barber, boro. engr.

Pa., Wampum—(Official)—Boro. plans to grade, curb and pave Main St. from north to south of borough line, monolithic rein. con. C. L. Repman, secy.

Va., Norfolk—City plans to widen and improve Cove St. W. H. Taylor, Jr., city engr.

Va., Richmond—City plans paving 1st Ave. from Meadow Bridge Rd. to Front St., granolithic pavement. C. E. Bolling, city engr.

N. C., Atkinson—City voted $20,000 bond issue to build roads. Address the mayor.

N. C., Fayetteville—See "Miscellaneous."

Ga., Dublin—City election Jan. 4, to vote on $35,000 bond issue to pave streets. Noted Oct. 18.

Ga., West Point—City and Troupe Co. (Lagrange Co. seat), plan to build concrete road 20 ft. wide, from city limits to Mt. Hope cemetery.

Fla., Quincy—City soon receives bids grading Jefferson, Washington, Adams and Madison Sts. About $54,000. J. B. McCrary Co., Atlanta, engrs. Noted June 14.

Miss., Corinth—Alcorn Co. sold $60,000 bonds to build Gulf Highway.

La., Alexandria—Rapids Parish plans to sell $75,000 bonds, Jan. 2, to build roads in Dist. No. 14.

O., Canton—Federal Government ordered Stark Co. Comrs. to improve Lincoln Highway from Osnaburg east to Columbiana Co. line, passing through Canton and Massillon.

O., Cincinnati—City plans to sell $70,500 bonds to improve Central Ave., and to issue $13,000 bonds to open and extend Millbrae Ave. from Oakley to Minot Aves. F. Krug, city engr.

O., London—(Official)—City at recent election defeated $30,000 bond issue for paving various streets. Noted Oct. 4.

O., Warren—City sold $25,000 bonds for resurfacing High St. and soon lets contract for same. H. S. McKibben, city engr.

O., Xenia—(Official)—City at election Nov. 13 defeated $17,000 bond issue for street improvements. Noted Aug. 30.

Ind., Anderson—Madison Co. Comrs. rescinded contract for paving Meridian Ave. let to Indiana Asphalt Paving Co., 25th St. and Lake Erie Western Ry. Work will be readvertised. Noted Sept. 20.

Ind., Ft. Wayne—Allen Co. sold $76,000 bonds to build 5 stone roads. Noted Sept. 27.

Mich., Hastings—Barry Co. Supervs. plan to complete Grand Rapids-Battle Creek Highway leading to Camp Custer, 8 mi. 16-ft. road. Noted Apr. 19.

Mich., Holland—City Council plans to pave Lincoln Ave. from 7th to 16th St. C. T. Bowen, city engr.

Ill., Petersburg—Menard Co. voted $55,000 bonds to build hard-surfaced roads. Federal Government will contribute toward cost.

Ill., Waukegan—Lake Co. voted $500,000 bond issue to improve Sheridan Rd. from Chicago to Wisconsin State line. This amount, together with $325,000 appropriated by State and Federal Government, will make $825,000 available for road work in county. Noted Sept. 27.

Wisconsin—State Highway Comn., Madison, plans to build 12th St. Rd. as trunk line between Racine and western end of county to connect village of Rochester with trunk highway between Burlington and Waterford. A. H. Hirst, state highway comr. Noted July 5.

Wis., Green Bay—Brown Co. Supervs. plan to improve following roads during 1918: Green Bay, New Franken & Kewaunee Rd.; Green Bay, Denmark & Manitowoc Rd.; East De Pere & Dixon Rd.; Glenmore, Lark & Wayside Rd.; De Pere-Greenleaf Rd.; Suamico & Oconto Rd.; Green Bay & Shawano Rd.; Pittsfield & Pulaski Rd.; Green Bay, Hobart & Seymour Rd.; West De Pere & Oneida Rd.; Town of Eaton Rd.; Bellevue Sta., East, Green Bay, Menominee Rd.; Sturgeon Bay. Rd.; Town of Scott. Greenleaf & Wrightstown Rd.; Green Bay. Ashwaubenon & West De Pere Rd.; Humboldt & Kewaunee Rd.; Greenleaf, Askeaton & Brillion Rd.; De Pere, Lawrence and Appleton Rd. About $175,000 will be expended. Noted Oct. 4.

Wis., Marinette—Marinette Co. plans to build 5-mi. highway from Baby's Corners south of Pestigo to Oconto Co. line; about $24,000. Federal Government to appropriate $8000 toward cost, state $8000 and county $8000. State and county will also build trunk road from Maccabee Hall to Pound. Cost, $8400.

Wis., Washburn—Bayfield Co. plans $500,000 bond issue for road work.

Wis., West Allis—City plans $50,000 bond issue for street improvements.

Ia., Red Oak—See "Sewers."

Kan., Chanute—City plans to pave West Sycamore St. from North Santa Fe to Forest Ave., vertical fiber brick. Chas. Pratt, city engr.

Kan., Wichita—Sedgwick Co. plans election to vote on $2,000,000 bond issue to build roads and bridges.

Kan., Winfield—Cowley Co. had plans prepared building Interurban road between Winfield, Augusta, El Dorado and Wichita.

Neb., Columbus—City will sell $15,000 bonds to pave streets in Dist. No. 2.

Neb., Rushville—Sheridan Co. Comrs., in coöperation with Alliance Commercial Club Alliance, plan to build road to Gordon. About $30,000.

Mont., Butte—(Official)—Silverbow Co. Comrs. rejected bids for paving, building sidewalks, parkings and curbs in Dist. No. 3. New bids. S. L. Anderson, co. clk. Noted Nov. 1.

Missouri—State Highway Comn., Jefferson City, had plans prepared building Joplin-Miami Rd., 7 mi. concrete. About $300,000. A. W. Graham, state highway engr.

Mo., Clinton—Henry Co. had plans prepared for state road from Windsor to Johnson Co. line. About 5 mi.

Mo., Doniphan—Ripley Co. plans election Dec. 11 to vote on $200,000 bond issue to build roads. Noted Oct. 11.

Mo., Fulton—Calloway Co. Comrs. plan to build 16 mi. Old Trails Highway, east of Fulton, to Montgomery Co. line. About $75,000.

Mo., Greenfield—(Official)—Dade Co. plans election Nov. 24 to vote on $28,000 bond issue for roads in Everton Special Rd. Dist. Former election illegal. J. C. Webb, co. clk. Noted Nov. 8.

Arkansas—State Highway Dept., Little Rock, had plans prepared road through Ozark National Forests, part Harrison-Russellville section of Jefferson Highway. Federal Government and State appropriated $40,000 and $20,000 respectively for work. Noted Oct. 4.

Ark., Little Rock—City plans to pave Pike Ave. from 18th to 27th St., concrete. H. Linvison, city engr.

Ark., Perryville—Perry Co. had plans prepared by State Highway Dept., Little Rock, building road from Bigelow to Crossroads, 6 mi. About $11,000.

Ark., Piggott—Clay Co. plans to build 32-mi. road from St. Francis to Greene Co. line with Federal aid.

Tex., Center—(Official)—Shelby Co. at recent election defeated $600,000 bond issue for road work. R. H. McCauley, clk. Noted Nov. 8.

Tex., Dallas—City soon lets contract grading Forest Ave. and building concrete culvert to be used in connection with Forest Ave. extension plan; also paving Lemmon and Washington Aves. and Howell St., bitulithic. H. Moseley, city engr.

Tex., Greenville—Hunt Co., White Rock Dist., voted $30,000 bonds to build 6 mi. highway connecting Wolfe City roads with Greenville Rd. at Kincer.

Tex., Junction—Comrs. Court of Kimble Co. plans election soon to vote on $150,000 bond issue to build roads.

Tex., Lockhart—Comrs. Court of Caldwell Co. plans election soon to vote on $200,000 bond issue for road work.

Tex., Palestine—Anderson Co. voted $50,000 in Frankston Precinct and $40,000 in Cayuga Rd. Dist. for road work. Noted Oct. 18.

Okla., Ada—City plans to pave East 9th and East 10th Sts. and Hope Ave. from Main St. north to 9th St.

Okla., Miami—Ottawa Co. plans election Dec. 4 to vote on $400,000 bond issue to build roads and jail. Noted Oct. 11.

Okla., Tecumseh—Pottewatommie Co. plans election to vote on $450,000 to build roads and Canadian Bridge.

Okla., Waurika—Jefferson Co. voted $25,000 bond issue to build roads and bridges in Wray Twp. Noted Oct. 18.

Idaho, Grangeville—Idaho Co. plans election soon in Joseph Domecq Dist. to vote on $30,000 bond issue for road leading to Cottonwood.

Idaho, Sand Point—Bonner Co. voted $200,000 bonds to build roads. Noted Oct. 25.

Utah, Payson—City Council plans paving 6 blocks, portland cement.

Ariz., Florence—See "Excavation and Dredging."

Wash., Seattle—City plans to pave Northlake Ave. from Fremont to Katona Aves.; Densmore, Wallingford, Burke, Meridian, Woodland and Park Aves.; Stone Way from Northlake Pl. to Ewing St., and Northlake Pl. from Wallington Ave. to Ewing St.

Streets and Roads (Continued)

Wash., Seattle—City election Mar. 6 to vote on $525,000 bonds to improve Shilshole Ave. and other streets in Ballard Mill Dist. A. H. Dimock, city engr.

Oregon—State Highway Comn., Salem, had plans prepared for Baker-Cornucopia Post Rd. E. Kingsley, state highway comr.

Ore., Astoria—Clatsop Co. plans to improve roads in Rd. Dist. No. 3 and Seaside Rd. Dist. About $31,000 and $29,500 respectively.

Ore., Roseburg—Douglas Co. plans to build portion Roseburg-Myrtle Point Rd. extending into Coos Bay. About $80,000 to be expended. Noted June 7.

Ore., The Dalles—Council passed resolution to improve Union St. from present pavement at 5th St. to south line of 10th; 6th St. from Union St. to 9th St. bridge; 10th St. from Union to Washington St.; Washington St. from 10th to Clay St.; Clay St. from Washington to Kelly St.; Court St. from 5th to 8th St.; Washington St. from 5th to Fulton St.; Fulton St. from Washington to F St.; Kelly Ave. from Fulton to Alvord St.; Federal St. from Alvord to Clay St., and from Alvord to Fulton St.; Laughlin St. from Alvord to Fulton St., and F St. from Alvord to Fulton St

Cal., Riverside—Riverside Co. soon receives bids building about 10 mi. highway between Thermal and Mecca.

Cal., Santa Barbara—Santa Barbara Co plans election Nov. 28 in Mesa Impvt. Dist. to vote on $19,000 bond issue for road improvements. About $28,000 will be expended. Noted July 26.

Ont., London—City receives bids about Dec. 15 for concrete, asphalt and stone required to build new pavements to cost about $250,000. H. Brazier, city engr.

Ont., Port Rowan—Council plans to improve Main St. About $20,000. W. A. Mabee, clk.

Ont., Windsor—City having plans prepared by A. Brian, city engr., for asphaltic concrete pavement About $75,000.

BIDS DESIRED

N. Y., New York—See "Bridges."

N. Y., New York—Until Nov. 27, by M. E. Connolly, boro. pres. (Queens Boro.), regulating, grading, curbing, paving and laying sidewalks, etc., portions Glasser, Sandol, 80th, Stephen, Beach, 117th, Decatur and Hill Sts., Forest and Jamaica Aves. and Tesla Pl.

N. Y., New York—Until Nov. 27, by C. D. Van Name, boro. pres. (Richmond Boro.), regulating and grading Great Kills Rd. from Amboy Rd. to Southside Blvd.

N. J., Jersey City—(Official)—Until Nov. 28, by Bd. Freeholders, for temporary improvement of Newark Turnpike from westerly end of bridge over Hackensack River to Schuyler Ave. W. O'Mara, clk. Noted July 12.

N. J., Trenton—(Official)—Until Nov. 27, by Bd. Freeholders Mercer Co., paving approaches to Bakers Basin Bridge on Brunswick Pike Rd., bituminous concrete surface, macadam foundation.

Ala., Ozark—Until Dec. 1, by Dale Co., improving Ozark and Trail Rds., being portion State Trunk Rd. No. 10, between Ozark and Troy, length 8.7 mi.; work involves 10 acres clearing and grubbing; 49,617 cu.yd. borrow; 17,830 cu.yd. sand-clay surfacing, 825 lin.ft. D. S. vitr. clay pipe; 50 cu.yd. concrete.

Ky., Lebanon—(Official)—Until Dec. 6, by Marion Co., building 5½-mi. inter-county road from here to Bardstown, beginning at Smocks Chapel and extending to Nelson Co. line. No bids received Nov. 12. S. J. Spalding, co. clk. Noted Nov. 8.

Mo., Stanberry—Until Dec. 3, by C. A. Greenlee, city clk., paving, curbing and guttering Main St. from Park to Willow St., 1st St. from Locust to High St. and alley in block 11 from Locust to Park St.

Tex., Texarkana—(Official)—Until Nov. 26, by City, paving Olive St., from 4th to 19th St., including 23,000 sq.yd. brick pavement and 4700 sq.ft. gutter. About $56,000. Noted Nov. 8.

Washington—(Official)—Until Dec. 3, by State Highway Comn., Olympia, improving Sunset and Central Washington Highways, involving clearing, grading, draining and surfacing 10 mi. in Grant Co. and 30 mi. in Franklin Co. Noted Aug. 2.

Oregon—(Official)—Until Nov. 27, by State Highway Comn., Yeon Bldg., Portland, for 1½ mi. grading in Wheeler Co., on Ochoco Forest Rd., 1 mi. from Mitchell; also building 90-ft. wood-span bridge (separate bid for bridge); 13 mi. grading in Douglas Co., on Pacific Highway, known as Myrtle Creek-Dillard Sect., involving 140,000 cu.yd. excav.; one 90-ft. rein.-con. viaduct across Goble Creek, in Columbia Co. on Columbia River Highway. Noted Oct. 25.

Cal., Santa Ana—Until Dec. 5, by Orange Co. Comrs., building Santa Ana canyon road from Peralta to Riverside Co. line; also paving Buena Park, Topeka mixture.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn—L. H. Pounds, boro. pres., let contract regulating and paving Hopkinson Ave., to Sicilian Asphalt Pav. Co., 41 Park Row, New York City, $21,793. Noted Oct. 18.

★N. Y., Brooklyn—L. H. Pounds, boro. pres., let contract improving Ave. M and West 36th St., to Cranford Co., 52 9th Ave., $15,095 and $11,610, respectively. Noted Nov. 1.

★N. Y., Long Island City—M. M. Connolly, boro. pres., let contract paving portion Hughes and Hancock Sts., to Sicilian Asphalt Paving Co., 41 Park Row, New York City, $10,475 and $11,681, respectively. Noted Oct. 18.

★N. Y., New York—D. Mathewson, boro. pres., let contract paving roadway of Bronx and Pelhahm P'kway., between Southern Blvd. and Butler St., and Butler St. and Boston Rd., to Union Paving Co., 120 Bway., $58,900. Noted Oct. 18.

★N. Y., New York—M. M. Marks, boro. pres., let contract improving roadway 59th St. to W. J. Fitzgerald, 547 West 47th St., $29,762. Noted Oct. 18.

★N. Y., New York—M. M. Marks, boro. pres., let contract improving portion 38th, 43rd, 44th, 45th and 46th Sts., to A. Ferris, 672 Degraw St., Brooklyn, $38,318; repaving portion Park Ave. to Asphalt Constr. Co., Madison Ave. and 137th St., $11,367. Noted Oct. 25.

N. Y., New York—M. M. Connolly, boro. pres. (Queens boro.), let contract improving portion Jamaica Ave., to Uvalde Asphalt Paving Co., 1 Bway., New York City, $93,783. Noted Oct. 4.

★N. Y., Yonkers—Bd. Contract & Supply let contract paving Central Ave., from south to north city limits, to J. E. Pawson Co., 58 Wells Ave. About $16,050. Noted Nov. 15.

N. J., Atlantic City—City received low bids building ornamental parkway from city limits to Virginia and Mediterranean Aves., from Hill Dredging Co., Atlantic and Somerset Pl., $153,589; E. L. Bader, Tennessee and Thorp Sts., $172,000, both of Atlantic City.

★S. C., Darlington—City rescinded contract let to Simons & Mayrant Co., 18 Broad St., Charleston, and relet same to Noll Constr. Co., Chattanooga, Tenn.; $57,019. Noted Nov. 8.

★Ia., Ida Grove—City let contract paving 36 blocks, Texaco asphalt, to J. S. McLaughlin & Sons, Red Oak; about $1.89 per sq.yd. Noted Nov. 8.

★Kan., Lindsborg—City let contract paving 25,173 sq.yd. Main St., vertical fiber brick, including 73 ft. curbing and guttering; also 5501 cu.yd. excav., to Geiger Constr. Co., Leavenworth. About 62,321. Noted Nov. 15.

★Tex., Ft. Worth—Tarrant Co. Comrs. let contract building tarvis pike from city limits to Nine-Mile Bridge, to D. H. Purvis, Ft. Worth. About $17,874. Noted Sept. 20.

★Colorado—State Highway Comn., Denver, let contract building 4 mi. Littleton-Denver Rd., 24 ft. wide, to C. Conner. About $73,929. Noted July 5.

★Ariz., Globe—(Official)—Gila Co. let contract building Sect. 2, El Capitan Rd., to R. O. Black, Clifton, $70,290. Noted Nov. 1.

★Wash., Seattle—King Co. Comrs. let contract building Auburn-Enumclaw Highway, to Kaiser Paving Co., Everett, $91,430.

★Wash., Seattle—City let contract paving 6th Ave. to McGuire Bros., American Bank Bldg., $33,825. Noted Sept. 27

★Oregon—State Highway Comn., Salem, let contract building Wolf Creek-Graves Creek Highway in Josephine Co., to Amer. Exploration & Contg. Co. About $56,947.

★California—State Highway Comn., Sacramento, let contract building 15.6 mi. highway between Garberville and Miranda in Humboldt Co., to Palmer & McBryde, Hooker & Lent Bldg., San Francisco, $223,555; laying asphaltic surface on highway between Fresno and Malaga, Fresno Co., to Blanchard-Brown Co., Call Bldg., San Francisco, $22,824; 10 mi. highway between San Fernando and Rancho Tujunga, Los Angeles Co., to A. L. McCray, 234 West 28th St., Los Angeles, $111,251. Noted Nov. 15.

★Cal., Los Angeles — City let contract grading and paving Exposition Blvd. from Roseburg Pl. to Menlo Ave., involving 109,315 sq.ft. grading, paving, 421 lin.ft. cement curb, 2059 sq.ft. and concrete gutter 290 sq.ft. granite block gutter, to G. R. Curtis, 2440 East 26th St. About $16,757.

★Cal., Oakland—(Official)—Alameda Co. Supervs. let contract building Castro Valley Rd. to Russell & Fernandez, Hayward, $82,861. Noted Nov. 15.

★Cal., San Diego—San Diego Co. let contract paving Lookout Dr. and Palm Ave., La Mesa Dist., to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles. About $17,000.

★Cal., San Diego—Bd. Superv. let contract building 6 mi. 20-ft. concrete road between San Diego and Camp Kearny, to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles. About $108,325. Noted Nov. 15.

★Que., Chicoutimi—Council let contract building macadam roadways to Riverin & Riverin, Chicoutimi. About $135,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Pennsylvania — Pennsylvania R.R. purchased property foot Welch St., Chester, and having plans prepared for extending its trunk line as far as Market St. and Marcus Hook, also building double draw bridge over Chester River on Market St. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Delaware — Pennsylvania R.R. plans to spend $3,000,000 to improve its Edge Moor yards, near Wilmington. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Texas—Southern Pacific R.R. plans to relay its tracks between Houston and El Paso with 90 lb. steel rails, about 297 mi. W. Hood, Flood Bldg., San Francisco, ch. engr.

California—Pacific Electric Ry., Pacific Electric Bldg., Los Angeles, plans to build extension from Santa Ana to San Diego. About 80 mi. J. McMillan, genl. mgr.

EXCAVATION AND DREDGING

Proposed Work

Ariz., Florence — (Official)—Reclamation —Theresa Hall Cotton Co. plans to reclaim and grade 3000 acres of land. R. W. Waterman, Blythe, Cal., engr.

Ariz., Parker—(Official)—Reclamation—Theresa Hall Cotton Co. plans to reclaim 2000 acres of land. R. W. Waterman, Blythe, Cal., engr.

Ariz., Phoenix—Irrigation—Paradise Valley Verde Water Users' Assn. plans to organize irrigation district and issue bonds to build projected Horseshoe dam.

Wash., Prosser—Irrigation—Prosser Irrigation Dist. prepared plans for pumping plant near Prosser to lift water from Sunnyside Canal to water 2000 acres above gravity flow. About $200,000.

BIDS DESIRED

Ind., Greenfield—(Official)—Drain—Until Dec. 1, by C. Boone, engr., Hancock Co., building Henry D. Holt et al. drain, Blue River Twp., involving 5839 ft. 7-20-in. tile; 1 retaining wall, cleaning out old channel, etc.

Ia., Rockwell City—Drainage—Until Nov 27, by R. B. Dixon, aud., Calhoun Co., improving D. D. No. 67, involving 17,000 ft 24-40-in. tile, also cleaning out or redigging main open ditch from Sta. 21 to Sta. 265 involving 25,880 excav

Excavation and Dredging (Continued)

Minn., Granite Falls—(Official)—Ditch—Until Dec. 11, by Yellow Medicine Co., building Judicial Ditch No. 7, involving 23,321 ft. 5-24 tile. About $20,616. Former bids rejected. G. H. Wilson, aud. Noted Nov. 1.

Minn., Montevido—Ditch—Until Dec. 1, by J. J. Stennes, aud., Chippewa Co., building Co. Ditch No. 22, involving 1,225,662 cu.yd. open work and 316,598 ft. 6-20-in. tile. About $202,329.

Minn., New Ulm—Ditch—Until Nov. 27, by Brown Co., building Ditch No. 43, involving 17,181 ft. 6-in. tile. W. P. Backer, aud.

Minn., St. James—Ditch—Until Dec. 11, by Watonwan Co., building Judicial Ditch No. 18, involving 62,986 ft. 6-34-in. tile, Judicial Ditch No. 13, 73,765 ft. 6-34-in. tile. J. C. Jensen, co. aud.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Ia., Ft. Dodge**—(Official)—Drain—Webster Co. let contract building Drain No. 258, to Burkland & Littell, Eagle Grove, Ia., $22,699. Noted Nov. 1.

★**Ia., Sibley**—Drainage—Osceola Co. let contract building D.D. No. 26, involving 57,230 ft. 6-30 in. tile, to Sibley Cement Co., Sibley. Noted Oct. 11.

★**Kan., Belvue**—Ditches—Bd. Dir. Belvue D. D. let contract building drainage ditches and changing course of channel, Lost and Welch Creek River Dist., to T. L. Campbell, Atchison, Kan., $17,000. Noted Oct. 4.

★**S. D., Armour**—(Official) — Drain—Douglas Co. let contract building Drain No. 4, involving open ditch 5 mi. long, 30,000 cu.yd. excav. and 750 ft. 20-in. tile, to H. Vander Pol, Corsica, 25c. and 27c. per cu.yd. respectively. Noted Nov. 1.

★**Ont., Hullett Twp.**—Drainage—Hullett and Grey Twps. let contract drainage work to A. Guhr, Brussels, Ont., $53,000.

INDUSTRIAL WORKS

Proposed Work

Mass., Boston—City having plans prepared by Maher & Winchester, archts., 8 Beacon St., 2-story fireproof market house. About $68,000.

Conn., Bridgeport — D. W. Flint, Allen Ave., Providence, R. I., having plans prepared by W. H. Van Tine, archt., Fisher Arcade Bldg., Detroit, Mich., for 3-story, 140 x 150-ft. factory. About $100,000.

N. Y., Brooklyn—Foster Impvt. Co., 2027 Douglas St., had plans prepared by S. Millman & Sons, archts., 1780 Pitkin Ave., for 1-story, 90 x 105-ft. garage. About $25,000.

N. Y., Brooklyn—M. C. K. Contg. Co., 2168 Dean St., having plans prepared by S. Millman & Son, archts., 1780 Pitkin Ave., 1-story, 100 x 100-ft. brick garage on Fulton St. About $25,000.

N. Y., Brooklyn—National Aniline & Chemical Co., 38 Ross St., plans to build 36 x 87 ft. power house at Ditmas Ave. and 83rd St. About $30,000.

N. Y., Brooklyn—Richnitz Bros., 44 Court St., had plans prepared by S. Millman & Son, archt., 1780 Pitkin Ave., 1-story, 90 x 220-ft. brick garage, Ave. C and Coney Island Ave. About $60,000.

N. Y., Brooklyn—Roberts Numbering Machine Co., 706 Jamaica Ave., having plans prepared by W. C. Winters, archt., 106 Van Sicklen Ave., building 2½-story factory. About $30,000.

N. Y., Buffalo—Beaver Board Co. plans to build 4-story, 40 x 80-ft. rein.-con. addition to its plant on Beaver Rd., Ontario St., and New York Central R.R. W. F. MacGlashan, pres.

N. Y., Buffalo—Fore River Shipbuilding Corp., 97 Howard St., Quincy, Mass., subsidiary of Bethlehem Steel Corp., had plans prepared, 1-story machine shop on Vulcan St., here.

N. Y., College Point—L. M. F. Eng. Co., Inc., had plans prepared by P. M. Coco, archt., 120 West 32nd St., for 1-story, 100 x 170-ft. factory, 4th Ave. and 10th St., here. About $150,000.

N. Y., New York—Chelsea Storage Warehouse, 112 W. 107th St., New York City, having plans prepared by Wortman & Braun, archts., 114 East 28th St., for 2-story addition to warehouse. About $45,000. L. Schramm, 426 West 26th St., pres.

N. Y., New York—Himoff Machine Co., 50 Church St., increased its capital stock from $100,000 to $250,000, and plans to build an addition to its factory.

N. Y., New York—B. Iannucelli, 1772 Mt. Hope Ave., having plans prepared by De Rosa & Pereira, archts., 150 Nassau St., 2-story, 100 x 112-ft. brick and iron garage on Inwood Ave. near McCombs Rd. About $25,000.

N. Y. ,New York—E. & H. Levy, 4th Ave. and 19th St., plans 3-story, 52 x 203-ft. rein.-con. factory on Purdy St. About $75,000.

N. Y., Niagara Falls—Elderfield Hartshorn Hardware Co., 40 Falls St., had plans prepared by Wright & Kremers, archts., 407 Gluck Bldg., for 1- and 2-story, 50 x 100-ft. tinshop and warehouse. About $25,000.

N. Y., Plattsburg — Plattsburg Alloys Corp. has increased its capital stock from $60,000 to $125,000, and plans to build addition to plant here.

N. Y., Syracuse—New Idea Double Tire Co., 261 West Onondaga St., plans 3-story, 50 x 150-ft. cement block factory. About $25,000.

N. J., Trenton—Empire Tire & Rubber Corp., North Clinton and Mulberry Sts., plans new addition to plant; also installation of new machinery. About $220,000. J. C. Murray, 800 Riverside Ave., treas.

Pa., Phila.—S. Sklaroff & Sons, 712 South 2nd St., had plans prepared 6-story, 22 x 145-ft. addition to storage warehouse. F. E. Hahn, 112 Chestnut St., engr. and archt., soon receives bids.

Wash., D. C.—Potomac Electric Power Co., 14th and C Sts., N. W., plans addition to factory. About $27,000. Milburn & Heister, Union Savings Bank Bldg., archt.

Va., Norfolk—Hampton Roads Shipbuilding & Dry Dock Co., has acquired 150 acres of land here and plans to construct shipbuilding plant. About $800,000. R. B. Wallace, genl. mgr.

La., Monroe—Monroe Hardware Co. had plans prepared 2-story, 110 x 200-ft., brick warehouse. About $50,000. J. W. Smith, Central Savings Bank & Trust Bldg., archt.

Tenn., Nashville—Bransford Realty Co., 219 6th Ave., N., plans brick and concrete warehouse, 125 x 29 ft., 8th Ave. About $60,000.

O., Cleveland—Blair Auto Co., 1717 Euclid Ave., soon lets contract 2- and 3-story, 64 x 86-ft., brick and rein.-con. addition to garage and salesroom. About $40,000. B. Blair, mgr.

O., Cleveland—Toledo Plate & Window Glass Co., 1014 West 11th St., soon lets contract, 120 x 150-ft. factory, St. Clair Ave. and Hamilton St. About $150,000. Walker & Weeks, 1900 Euclid Ave., archts.

O., Cleveland—Wicklow Constr. Co., 700 Marshall Bldg., having plans prepared for 146 x 165-ft. garage, St. Clair and Ontario Sts. About $250,000.

O., Dayton—Buckeye Iron & Brass Wks., 326 East 3rd St., recently increased its capital stock from $75,000 to $200,000, and plans to build an addition to its factory.

O., Springfield—Springfield Baking Co., 132-36 West Washington St., having plans prepared by Cooley & Co., archts., Century Bldg., Pittsburgh, Pa., 2-story, 50 x 80-ft. addition to bakery.

Mich., Detroit—See "Buildings."

Mich., Detroit—Dodge Bros., Campau and Hamranck Aves., having plans prepared for munition factory. About $1,500,000.

Mich., Muskegon—Anderson Packing Co. having plans prepared by H. C. Christensen, archt., 7258 South Union St., Chicago, for 2-story packing plant. About $150,000.

Ill., Chicago—Harrington & King Perforating Co., 612 North Union Ave., having plans prepared for 1 and 2-story factory, Taylor and Campbell Aves. About $150,000.

Ill., Chicago—Kenderdine Campbell Co., 3256-7 Fullerton Ave., soon lets contract, 2-story garage and show room. About $30,000. R. G. Pierce, 10 South La Salle St., archt.

Ill., Chicago — B. Lasers & Sons, 1462 Newberry St., having plans prepared by A. Anis, archt., 155 North Clark St., 3-story, 48 x 100-ft. warehouse. About $50,000.

Ill., Chicago — G. C. Mimmons & Co., archts., 122 South Michigan Ave., soon lets contract, 8-story, 100 x 100-ft. rein.-con. factory, Kinzie and Franklin Sts., for Union Specialty Machine Co., 300 West Kinzie St. Noted Sept. 27.

Ill., Chicago — H. G. Seal Co., 4410 Ravenswood Ave., represented by Rosenberg & Reininger, 111 West Washington St., having plans prepared by W. T. Branitsky, archt., 54 West Randolph St., for 2-story, 120 x 125-ft. factory on Ravenswood St. About $100,000.

Ill., East St. Louis—St. Louis Coke & Chemical Co., subsidiary of American Coke & Chemical Co., 608 South Dearborn St., Chicago, plans coke plant here. About $10,000,000. W. G. McGuire, St. Louis, secy.

Wis., Appleton—Eagle Mfg. Co., increased its capital stock from $200,000 to $500,000 and plans to build addition to its factory here. F. Saiberlich, pres.

Wis., Menasha—Menasha Wire & Mfg. Co. plans to build factory here. About $25,000.

Wis., Monroe—L. E. Gette, c/o Industrial Coöperative Union, soon lets contract, 3-story, 45 x 130-ft. cold storage warehouse. About $60,000. C. F. Ringer & Son, University Bldg., Milwaukee, archts.

Tex., Houston—Sinclair Gulf Refining Co., subsidiary of Sinclair Gulf Corp., 120 Bway., New York City, plans to build refinery, also pipe line here, to consists of 4 units. About $6,000,000.

Okla., Oklahoma—H. E. Bagby soon lets contract, 3-story, 50 x 40-ft. garage. About $25,000. L. H. Bailey, Colcord Bldg., archt.

Okla., Pawhuska — City voted $75,000 bonds to improve gas plant. P. H. McMahon, clk.

Ariz., Bisbee—City Council plans election soon to vote on $375,000 bond issue to build new electric-lighting and gas-manufacturing plants, also water system.

Wash., Seattle—Elliot Shipbuilding Co. plans to construct 280 x 320-ft. shipbuilding shed; cost, $35,000; also office building, foundry and machine shop; $135,000.

Ore., Baker—Baker White Pine Lumber Co. plans to build sawmill between Baker and Durkee. About $175,000. W. J. McIntyre, representing Murray Mfg. Co., Wausau, Wis., archt.

Cal., Monterey—B. J. Sanderman plans to build 3 fish canneries here, 60 x 100 ft., 80 x 100 ft., 100 x 125 ft. About $50,000.

Cal., Sacramento—State Printing Office, 15th and M Sts., plans new shop on 8th St. About $100,000.

Cal., San Diego—Craig Shipbuilding Co., Bway. and Water St., Long Beach, plans shipbuilding plant near municipal pier here. About $500,000.

Cal., San Francisco—Fowler Airplane Corp., 128 12th St., plans to build factory to contain about 50,000 sq.ft. space.

N. S., New Glasgow—Nova Scotia Steel and Coal Co., Ltd., plans addition to plant here. About $4,000,000. F. H. Crockard, genl. mgr.

Que., St. Romauld—Dussault Co., Levis, had plans prepared for machine shop. About $50,000. M. J. Et Dussault, Wolfe St., Levis, pres.

B. C., Prince Rupert—S. E. Landry, Vancouver, plans to construct shipbuilding plant. About $250,000.

BIDS DESIRED

N. J., Linden—(Official)—Until Nov. 26, by C. H. Higgins, engr., 165 Bway., New York City, for 2 new buildings, 3 story, 32 x 51 ft., and 3 story, 18 x 36 ft., rein.-con., brick and hollow tile; also alterations to 1-story, 25 x 100-ft. building, Elizabeth Ave. and Style St., for Transatlantic Chemical Corp., owners, 80 Wall St., New York City.

Pa., Phila.—Until Nov. 26, by Phila. & Reading Ry., for engine house and machine shop, Erie Ave. Yard, 3rd and Erie Ave. S. T. Wagner, ch. engr.

Wash., Grand Mound—See "Buildings."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., New York**—Washburn Wire Co., 118th St. and Harlem River, let contract rebuilding factory recently destroyed by fire, to Deeves & Bro., 101 Park Ave.

★**N. J., Camden**—(Official)—New York Shipbuilding Co., 120 Bway., New York City, let contract steel addition to forge shop; 2 50 x 67-ft. additions to warehouse, 133 x 140-ft. brick addition to machhine shop; and miscellaneous items, including 3 structural-

Industrial Work (Continued)

steel buildings, "overways," wood and steel trestle and "T" and "U" building, about 354 x 785-ft., to its plant at Bway and Fairview St., to McClintic-Marshall Co., 1937 Ridge Ave., Phila.

★**N. J., Newark**—American Can Co., 129 Bway., New York City, let contract 3-story, 100 x 300-ft., brick, rein.-con. factory, Whorter St., to Amer. Concrete Steel Co., 27 Clinton St.

★**Pa., Edgewater** — (Oakmont P. O.)—Edgewater Steel Co. let contract building addition to factory here, to Austin Co., 14230 Euclid Ave., Cleveland, O. About $100,000.

★**Pa., Phila.** — Bellevue Worsted Mills, Wister St. and Pennsylvania R.R., let contract, 61 x 412 ft. factory, 16th St. and Huntington Park Ave., to H. E. Baton, 12 Sansome St., $152,000. Noted Apr. 5.

★**Pa., Phila.**—J. T. Lewis & Bro., Lafayette Bldg., let contract 2-story, brick and concrete factory addition to Turner Concrete Steel Co., 1713 Sansom St. About $150,000.

★**W. Va., Mullens** — (Official) — Mullens Ice & Cold Storage Co., let contract cold-storage and bottling plant, to Earley Bros., Mullens, $36,000. Noted Nov. 8.

★**O., Bedford**—Bedford China Co. let contract 1st unit of pottery plant, 1 story, brick and concrete, to W. Dunbar Constr. Co., 6201 Cedar Ave., Cleveland. About $150,000. Total cost, $500,000.

★**O., Cleveland**—Parish & Bingham Co. let contract 2-story, 50 x 220-ft. and 1-story, 50 x 265-ft. machine shop, die and storage buildings, to W. I. Thompson Co., 6110 Euclid Ave., percentage basis.

★**O., Cleveland**—Wellman-Seaver-Morgan Co., 7000 Central Ave., S. E., let contract for 130 x 400-ft. steel factory in connection with its Akron works, to G. A. Fuller Co., 404 Swetland Bldg.

★**O., Elyria**—Willys Overland Co., Overland Bldg., Toledo, let contract, 1-story, 30 x 40-ft. boiler house, to Crowell-Ludoff-Little Co., 1951 East 57th St., Cleveland, $70,000.

★**Ill., Peoria**—Holt Mfg. Co., West Washington, East Peoria, let contract, 1-story, 140 x 300-ft. foundry, to V. Jobst & Sons, 109 South Jefferson St. Noted July 26.

★**Wis., Cudahy**—Federal Rubber Co. let contract 1-story, 60 x 100-ft. factory here, to Leonard Constr. Co., 332 South Michigan Ave., Chicago, $150,000.

★**Wis., Manitowoc**—Tinsel Mfg. Co. let contract 3-story, 60 x 120-ft. factory, 16th and Hamilton Sts., to W. W. Oeflein, 86 Michigan St., Milwaukee.

★**Wis., Milwaukee** — American Grinder Mfg. Co., 2203 Sycamore St., let contract 2-story, 85 x 121-ft. addition to shop, to Coddington Eng. Co., North Milwaukee, $35,000.

★**Ia., Dubuque**—Adams Co., 295 6th St., let contract 2-story, 74 x 249-ft. factory, to A. Zwack, 1301 Clay St., $40,000.

★**Kan., Arkansas City**—Kansas Gas & Electric Co. let contract large addition to plant to Phoenix Constr. Co., 721 Munsey Bldg., Baltimore, Md.

★**Kan., Wichita**—O. A. Boyle, c/o Boyle Comn. Co., 135 North Rock Island Ave., let contract, 3-story, 40 x 100-ft. warehouse, to G. Siedhoff Constr. Co., 301 Finance Bldg., Kansas City, Mo., $30,000.

★**Neb., Ord**—City let contract electric-light plant to Merkle-Heins Machinery Co., 508 Interstate Bldg., Kansas City, Mo., $27.000.

★**Wyo., Torrington**—J. P. Nolan let contract 2-story, 100 x 140-ft. garage, to Ideal Constr. Co., Bridgeport, Neb., $30,000.

★**Okla., Oklahoma**—Sifers Candy Co., 517 Grain Ex. Bldg., let contract, 5-story, 50 x 100-ft. factory, to Campbell & Price, 610 Majestic Bldg., $90,000. Noted Aug. 9.

★**Ont., Fergus**—J. Wilson & Sons, St. Andrews St., let contract 5-story, brick and steel sawmill to G. J. Beattie, 72 Victoria St., Toronto. Noted Nov. 15.

★**Ont., Sault St. Marie**—Algoma Steel Corp. let contract 6 Gunite buildings to be built by Cement-Gun method, to Burns Cement Gun Constr. Co., Ltd., Toronto.

BUILDINGS

Proposed Work

Mass., Haverhill — Hospital — City soon lets contract, 3-story, 40 x 140-ft., and 1-story, 25 x 50 ft. H. W. Colby, 46 Cornhill St., Boston, archt.

Mass., Roxbury—Hospital—Grand Lodge of Elks plans to build hospital for sailors and soldiers on Parker Hill, to consist of 6 units. About $200,000. Address J. R. Nicholson, 45 Commercial Wharf, Boston.

Conn., New Haven—Hotel—A. Porto had plans prepared by R. Williams, archt., Chamber of Commerce Bldg., 4-story, brick, Columbus Ave., and Water St.

Conn., New Haven—Office—W. P. Curtis, c/o Union & New Haven Trust Co., 57 Church St., representing syndicate, having plans prepared by C. Gilbert, archt., 244 Madison Ave., New York City, 10-story, fireproof, on Church St. About $800,000.

N. Y., Brooklyn—Bank—Peoples Natl. Bank, 1336 Bway., having plans prepared by Koch & Wagner, archts., 26 Court St., 1 story, 44 x 106 ft., Quincy St. and Ralph Ave. About $130,000.

N. Y., Brooklyn—Hospital—Maternity Hospital Society, 1666 Pitkin Ave., soon lets contract. About $75,000. Cohn Bros., 363 Stone Ave., archts.

N. Y., Brooklyn—Restaurant and Theater—Putnam Theatrical Co., c/o M. Loew, 1493 Bway., New York City, had plans prepared by T. W. Lamb, archt., 644 8th Ave., New York City. About $500,000.

N. Y., Freeport—Theatre and Office—F. Tinney, c/o C. E. Kern, archt., 55 East Ave., soon lets contract, 2 story, 117 x 200 ft.

N. Y., New York—Court—City had plans prepared by A. Hopkins, archt., 101 Park Ave., 2-story, 44 x 100-ft. brick and marble, 2nd St. and 2nd Ave. About $150,000. W. McAdoo, 300 Mulberry St., chief city magistrate.

N. Y., Randalls Island—Kitchen—City of New York having plans prepared by D. Barber, archt., 101 Park Ave., New York, City, 1-story. About $65,000. J. A. Kingsbury, Municipal Bldg., New York City, comr. charities.

N. J., Trenton—Administration, Home, Etc.—Bd. Mgrs. State Home for Girls plans colony to include administration building, 3 separate wards, etc. About $300,000. Dr. J. M. Reese, Phillipsburg, pres.

Pa., Harrisburg—Hospital—State plans. About $200,000. Address Lewis S. Sadler, Carlisle.

Pa., Phila.—Club—Drexel Hill Club had plans prepared, 2 story, Garrett Rd. and Beaumont Ave. About $60,000.

Pa., Warren—Hospital—Warren State Hospital for Acute Patients having plans prepared by Kendall, Taylor & Co., 93 Federal St., Boston, Mass., and E. A. Phillips, Warren Trust Bldg., archts., for new buildings. About $250,000.

Pa., Tamaqua—High School—Bd. Educ. plans. Bonds for $125,000 voted for work.

Ga., Atlanta — Store — Davison-Paxon-Stokes Co., 59 Whitehall St., has leased McClure store corner, Whitehall and Hunter Sts., and plans to build new 4-story, 31 x 103-ft. building. W. T. Downing, Grant Bldg., archt.

O., Cleveland—Store—Wolfe-Sill Realty Co., 715 Garfield Bldg., having plans prepared by Steffens & Steffens, archts., 1027 Williamson Bldg., brick and concrete, at East 141st and St. Clair Sts. About $60,000.

O., Dayton—Bank—General City Bldg. & Loan Assn. had plans prepared by Schenk & Williams, archts., 591 Arcade Bldg., 1 story, 38 x 50 ft. About $100,000. O. J. Bard, mgr.

O., Deshler—School—City election soon to vote on $80,000 bond issue to build school.

O., East Cleveland—(Cleveland P. O.)—Junior High School—Bd. Educ. soon lets contract, 3-story, rein.-con. and brick. About $200,000. C. S. Schneider, 2258 Euclid Ave., Cleveland, archt.

O., East Cleveland—(Cleveland P. O.)—Hospital—Hospital Comrs. soon let contract, 4 story, 88 x 250-ft., brick, rein. con. and steel. About $200,000. W. Hirsch, 1303 Swetland Bldg., archt. Noted Aug. 23.

O., London—Prison—State plans to build near here. Cost between $3,000,000 and $4,000,000. Richards, McCarty & Bulford, Hartman Bldg., Columbus, archts.

O., Norwood—School — Bd. Educ. had plans prepared, 2-story, 79 x 131 x 138 ft. H. Hake & C. Kuck, Telephone Bldg., Cincinnati, archts., soon receive bids.

O., Ravenna—Hospital—Portage Co. election soon to vote on $50,000 bond issue to build hospital.

O., Shaker Heights (Cleveland P. O.)—School—Bd. Educ. will receive bids about Jan. 1. Cost, $300,000. F. C. Warner, Hippodrome Annex, Cleveland, archt.

O., South Newburg—(Cleveland P. O.)—School—Town plans to build. Bonds for $50,000 voted for work.

O., Steubenville—Hotel—C. Mildner, Imperial Hotel, represents company having plans prepared by Peterson & Clark, archts., Nath Bldg., to construct hotel. About $300,000.

O., Toledo—Hotel—Ohio Athletic Club having plans prepared by Mills, Rhines, Bellman & Nordhoff, archts., 1234 Ohio Bldg., 10 story, 125 x 150 ft., 11th St. and Madison Ave. About $500,000.

Ind., Farmerville—Court House—Spencer Co. plans. About $125,000.

Ind., Ft. Wayne—Store—D. N. Foster Furniture & Carpet Co., 715-17 Court St., plans, 4 story, 70 x 126 ft., tile, on Main St.

Mich., Alma—Hotel—Alma Development Co. plans. About $150,000. E. R. Dunley, Hammond Bldg., Detroit, archt.

Mich., Detroit—Office—Michigan State Telephone Co. plans, 8 story, 100 x 214 ft., Michigan and State Sts. About $1,250,000. Smith, Hinchman & Grylls, Washington Arcade, archts.

Mich., Jackson—Hotel—J. Cavanaugh, 251 Main St., having plans prepared by E. E. Bailey, archt., Chambers Bldg., Oil City, Pa. About $200,000.

Ill., Chicago—Hotel—A. Pick & Co., 212 West Randolph St., plans, 10 or 12 story, 84 x 90 ft., Madison and Market Sts. About $600,000.

Ill., Chicago — Office — See "Industrial Works."

Ill., Lake Forest—Church—Methodist Congregation plans, on Market Sq. About $100,000. D. W. Brown, pastor.

Ill., Rock Island—Hospital—Sisters of Mercy having plans prepared by A. Dohmen, archt., 1st Natl. Bank Bldg., Milwaukee, Wis. About $200,000.

Ill., Urbana — Hospital — University of Illinois plans, on Armour Ave. About $120,000.

Wis., Kenosha — Theater—A. Meis, c/o Virginia Theater, had plans prepared by White, White & White, archts., 414 Pub. Serv. Bldg., 2-story, 65 x 140 ft. About $90,000.

Wis., Lake Geneva—Hospital—Northwestern Military & Naval Academy, Lake Geneva, having plans prepared by Marshall & Fox, archts., 706 Lincoln Ave., Chicago, building hospital and refectory; also power and lighting plant. About $125,000.

Wis., Milwaukee — High School — Bd. Educ. plans, 4 story, 250 x 250 ft., Lenox and Montana Sts. About $600,000. Van Ryn & De Gelleke, 726 Caswell Blk., archts.

Wis., Milwaukee — Terminal — Chicago North Shore Rd. had plans prepared, Grand Ave. About $250,000. B. J. Fallon, 72 West Adams St., Chicago, ch. engr.

Wis., Washburn—Club House—Du Pont Powder & Munitions Co., Du Pont Bldg., Wilmington, Del., plans to build here for employees. About $80,000.

Ia., Des Moines—Hotel—Witmer Estate, 201 Manhattan Bldg., plans, 4th and Locust Sts. About $1,000,000.

Ia., Dubuque—Hospital — Dubuque Co. having plans prepared by K. F. Saam, archt., 428 Security Bldg., 2-story, 7th Ave. About $75,000. R. Benson, chn. bldg. comn.

Ia., Newton — Church — Congregational Church plans to rebuild church destroyed by fire last winter. About $60.000. G. C. Williams, pastor.

Ia., Pella—Dormitory, Etc.—Central College plans to build women's dormitory, gymnasium and auditorium. About $100,000.

Minn., Alexandria—Court House and Jail—Douglas Co. plans 2-story, 104 x 192-ft. courthouse, rein.-con. and marble, and 2-story, 74 x 100-ft., rein.-con. jail, on Belknap St.

Minn., Austin—Hospital—St. Olaf's Hospital, 908 Lansing St., soon lets contract, 8-story. About $50,000. C. S. Sedgwick, Lumber Ex. Bldg., Minneapolis, archt.

Minn., Minneapolis—Hotel and Stores—C. G. Wentworth, 100 Metropolitan Life Bldg., had plans prepared by J. W. Lindstrom, archt., Andrus Bldg., 3-story, 50 x 165-ft. hotel and 3 stores.

Buildings (Continued)

Tex., Waco—School—Bd. Educ. having plans prepared by L. Schmidt, archt., 121 North Market St., for addition. About $60,000.

Okla., Miami—See "Streets and Roads."

Wash., Seattle—See "Industrial Works."

Ont., Winona—Aerodrome—Royal Flying Corps, 56 Church St., Toronto, plans aerodrome, including hangars, water-works, lighting system, sewerage system and concrete roadways. About $500,000. J. B. Carswell, 56 Church St., Toronto, archt.

BIDS DESIRED

N. Y., Suffern—Hospital—Until Dec. 8, by Rockland Co. Comrs., for tuberculosis hospital. Tooker & Marsh, 101 Park Ave., New York City, archts.

Pa., Harrisburg—Junior High School—Until Nov. 27, by Bd. Educ., 4-story. About $300,000. C. Howard, Lloyd Telegraph Bldg., archt.

O., East Cleveland—(Cleveland P. O.)—(Official)—Junior High School—Until Dec. 10, by Bd. Educ., 3-story, rein.-con. and brick. About $200,000. C. S. Schneider, 2258 Euclid Ave., Cleveland, archt. Noted Nov. 15.

Ind., Lafayette—Office—Until Nov. 27, by Lafayette Life Insurance Co., 10 story, 51 x 121 ft., 3rd and Main Sts. J. A. Alexander & Son, Ball Blk., archts. Noted July 19.

Ia., Corinth—School—Until Nov. 26, by Bd. Educ., 2 story, rein. con. About $70,000. W. C. Oelke, secy.

Kan., Wichita—Hospital—Until Jan. 1, by Wesley Hospital, for 1st unit, 4 story. About $250,000.

Wash., Grand Mound — Cottage — Until Dec. 1, by O. A. Togerson, secy. state bd. control, Olympia, building cottage and power plant at state institution. About $70,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Yonkers—School—Bd. Educ. let contract addition to School No. 16 to T. & C. Miller Bros., 244 Riverdale Ave. About $70,000.

★Pa., Ashley—High School—Bd. Educ. let contract, 2 story, 100 x 118 ft., brick and steel, to E. J. Donohue, Ashley. Noted Sept. 6.

★Wash., D. C.—Office—Arlington Bldg., Inc., c/o Wyatt & Nolting, archts., Keyser Bldg., Baltimore, Md., let contract on Vermont St. to Underpinning & Foundation Co., 290 Bway., New York City. About $2,500,000.

★Ala., Birmingham—Schools—Bd. Educ. let contract 3 schools to J. W. Ager, $58,000. Noted Oct. 11.

★Mich., Detroit—Store—R. H. Fyfe & Co., Woodward Ave., let contract 10-story store and garage, to J. T. Mayhew, 317 Grand River St., $300,000.

★Mich., Port Huron — Grade and High School—Bd. Educ. let contract junior high and grade school, to A. Schultz, 805 Bancroft Ave., $113,224. Noted July 26.

★Ia., Templeton—School—Bd. Educ. let contract consolidated school building to C. W. Ennis, Toledo, Ia., $64,925.

★Minn., Minneapolis—Hospital, Etc.—Bd. Charities and Corrections, Court House, let contract 3-story, rein.-con. hospital, and 1-story, 25 x 10-ft., rein.-con. power house, to R. J. Cheney & Co., 716 11th Ave. About $86,748. Noted Oct. 4.

★Kan., Lawrence—Administration and Liberal Arts—State University let contract, 3-story, rein.-con., to Olson & Johnson, 1st Natl. Bank Bldg., Omaha. About $300,000. Noted Sept. 20.

★Tex., Beaumont—Freight Depot—Gulf Coast Line, Amer. Trust Bldg., let contract Neches and Bowie Sts., to H. Weber, Beaumont. About $50,000. Noted Oct. 4.

★Tex., Denton—Church — First Baptist Church will be built by day labor. About $50,000. Address J. W. Alexander, Denton.

★Okla., Okmulgee — Hospital — City let contract 3-story, 40 x 80-ft. steel, concrete and brick, to L. Crosby & Son Constr. Co., Massachusetts Bldg., Kansas City, Mo., about $50,000. Noted Nov. 15.

★Colo., Denver—Museum—City and Denver Co. let contract, 2½-story addition, to A. Olson, 655 Vine St., $75,000.

★Wash., Tacoma—(Official)—Theater—J. S. Baker & H. F. Moore let contract 3-story, 90 x 120-ft., rein.-con., steel and brick, 9th and Market Sts., to Dawson & Dahlberg, Tacoma, $60,000. Noted Nov. 1.

FEDERAL GOVERNMENT WORK

Proposed Work

N. Y., Waterloo—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Oct. 28. Noted Nov. 1.

Pa., Ft. Mifflin—Ammunition Box Repair House and Central Heating Plant—Bureau Yards and Docks, Navy Dept., Wash., preparing plans; Specification No. 2716.

Pa., Ft. Mifflin—Marine Barracks—Bureau Yards and Docks, Navy Dept., Wash., preparing plans; Specification No. 2717. About $70,000.

Wash., D. C.—Addition to Hospitals — War Dept., I. W. Littell, brig. genl. soon lets contract for additions to present base hospitals at Camp Mills, Garden City, and Camp Upton, Yaphank, L. I.

La., Grande Isle—Buildings—E. P. Bertholf, capt. commandant, U. S. Coast Guard, Wash., D. C., rejected bids opened Oct. 29 for new buildings and accessories for Coast Guard Station No. 214, Baratarvia Bay. Noted Nov. 1.

O., Kenton—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Nov. 1. Work will be readvertised. Noted Nov. 8.

BIDS DESIRED

R. I., Melville—Dredging—Until Dec. 3, by Bureau Yards and Docks, Navy Dept., Wash. About $26,500. Noted Nov. 1.

R. I., Newport—Warhead Storage Building—Until Nov. 26, by Bureau Yards and Docks, Navy Dept., Wash., building, on Rose Island. About $15,000.

Conn., New London—Power House and Machine Shop—Until Nov. 30, by Bureau Yards and Docks, Navy Dept., Wash., building at submarine base; Specification No. 2626.

N. J., Lake Denmark — Fencing — Until Nov. 26, by Bureau Yards and Docks, Navy Dept., Wash., fencing U. S. magazine buildings. About $54,000.

Md., Indian Head—Powder Dry Houses—Until Nov. 24, by Bureau Yards and Docks, Navy Dept., Wash. About $230,000.

Wash., D. C. — Locomotive Dry Dock Cranes—Until Nov. 26, by Bureau Yards and Docks, Navy Dept., for furnishing at Norfolk, Va., Phila. and New York Navy Yards.

Wash., D. C.—Pattern Shop—Until Dec. 3, by Bureau Yards and Docks, Navy Dept., Wash., building at Navy Yard. About $475,000.

Wash., D. C.—Refrigerating Apparatus, Electric Freight Elevators, Meat Dregs, etc.—Until Dec. 10, by Major B. Crowell, E. O. R. C., U. S. Army, genl. purch. agt. Panama Canal, Wash., D. C.; advertised in this issue.

La., Alexandria—Post Office—Until Dec. 27, by J. A. Wetmore, superv. archt., treas. dept., Wash. Noted May 3.

Ill., Rock Island—Addition to Filtration Plant—Until Nov. 25, by G. W. Burr, colonel ordnance dept., Rock Island Arsenal, enlarging filtration plant.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston — Heating Apparatus — Bureau Yards and Docks, Navy Dept., Wash., let contract installing heating apparatus, Commonwealth Pier, to Walworth-English Flett Co., 100 Pearl St., $6123. Noted Nov. 8.

Mass., Boston — Timber Bulkhead — Bureau Yards and Docks, Navy Dept., Wash., received low bids building at Navy Yard, (work complete), from W. L. Miller Co., Boston, $7290; C. M. Leach, Boston, $7373; Randall Stoddard Co., Chelsea, $12,998. Noted Nov. 1.

Mass., Chelsea—Heating, Plumbing and Lighting—Bureau Yards and Docks, Navy Dept., Wash., received low bids installing in emergency hospital, from Lynch & Woodward, 26 Beach St., Boston, $392,975; Buerkel & Co., 24 Union Park St., Boston, $410,383; Lord Electrical Co., 112 Water St., Boston, cost plus percentage. Noted Nov. 8.

★R. I., Newport—Battery Shed—Bureau Yards and Docks, Navy Dept., Wash., let contract battery sheds for Submarine Sta., to Darling & Slade Constr. Co., 52 Bridge St., $27,000.

★R. I., Newport—Extension to General Storehouse—Bureau Yards and Docks, Navy Dept., Wash., let contract, to J. Herndon, 12 Boynton St., Worcester, Mass., $147,833. Noted Nov. 15.

Conn., New London—Torpedo Shop and Storage Building—Bureau Yards and Docks, Navy Dept., Wash., received low bids, building at submarine base, (a) net price, (b) using concrete foundation, from M. F. Kelley, 401 West 126th St., New York City, (a) $35,867, (b) $35,000; Darling Slade Constr. Co., Contractors Bridge, Newport, R. I., (a) $39,488, (b) $35,536; R. H. Arnold & Co., Woodward Bldg., Wash., D. C., (a) $43,950, (b) $41,718. Noted Oct. 25.

★N. Y., Brooklyn—Addition to Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract, to B. Knapp, 431 West 41st St., New York City, $25,670.

★N. Y., Brooklyn—Emergency Hospital—Bureau Yards and Docks, Navy Dept., Wash., let contract to Frymier, Hanna Co., 25 West 45th St., New York City, $298,612.

N. Y., Brooklyn — Shipbuilding Ways—Bureau of Yards and Docks, Navy Dept., Wash., received bids Nov. 19, (a) excav., (b) filling, (c) dredging, (d) timber work, (e) timber work, (f) removal of quay wall, (g) rein.-con., (h) plain concrete, (i) rein.-steel, (j) expansion joints, (k) miscellaneous metals, (l) rip rap, (m) recovering and resetting granite coping, (n) miscellaneous work, (o) concrete piles (alternate only), Specification 2577, from:

Jarrett-Chambers Co., 30 East 42nd St., New York, (a-1), $1.20; (a-2), $3.60; (a-3), $10; (b) $.28; (c), $.44; (d), $.39; (e-1), $2.18; (e-2), $175; (e-3), $215; (e-4), $208; (e-5), $86; (e-6), $107; (e-7), $30; (f) $12,000; (g-1), $42; (g-2), $40; (h-1), $12; (h-2), $11; (h-3), $39; (i), $.078; (j), $243; (k-1), $.088; (k-2), $.053; (k-3), $.083; (k-4), $.105; (k-5), $.078; (l), $1.64; (m), $2.46; (o), $1.80; time, 240 days.

I. J. Stander & Co., 118 East 28th St., New York, (a-1), $2; alternate, $2.10; (a-2), $4.30; alternate, $4.30; (a-3), $6.40; (b), $.25; (c), $2.50; (d), $.60; (e-1), $178; (e-2), $186; (e-3), $156; (e-4), $157; (e-5), $153; (e-6), $115; (e-7), $14; (f), $14,000; (g-1), $15; (g-2), $16; (g-3), $24; (h-1), $12; alternate, $18; (h-2), $18; (h-3), $23.50; (i), $11; (j), $400; (k-1), $.14; (k-2), $.97; (l), $170; (m), $1.50; time, 270 days.

Degnon Contg. Co., 68 Hunterspoint Ave., Long Island City, (a-1), $5; (a-2), $6.30; (a-3), $8; (b), $2; (c), $2; (d), $.65 alternate, $.75; (e-1), $165; (e-2 to 6), $165; (e-7), $75; (f), $10,000; (g-1), $20; (g-2), $21; (g-3), $22; (h-1), $17; (h-2), $18; (h-3), $19; (i), $.08; (j), $125; (k-1), $.15; (k-2), $.10; (k-3), $.10; (k-4), $.12; (k-5), $.12; (l), $5; (m), $3; time, 240 days. Noted Oct. 18.

N. Y., New York—Aircraft Storage and Aircraft Repair for Export—Bureau Yards and Docks, Navy Dept., Wash., received low bids, (a) work complete, (b) structural steel (c) and (d) alternate from Post & McCord, 100 Park Ave., (a) $264,000, (c) deduct $6000, (d) add $450; Austin Co., Bulletin Bldg., Phila., (a) $269,850, (b) $198,800, (c) $269,675, (d) $269,160; J. Stewart & Co., 30 Church St., (a) $275,000 (b) $200,000, (c) deduct $3000, (d) add $2000; U. S. Steel Products Co., 30 Church St., (b) $86,288.

N. Y., New York—Pneumatic Tube System—Bureau Yards and Docks, Navy Dept., Wash., received low bids (a) work complete, (b, c and d) alternate bids; from Lampson Co., Boston, Mass., (a) $25,832, (b) $13,111, (c) $1.72, (d) $.69; Standard Store Service Co., Inc., 304 Madison Ave., (a) $75,800, (b) $35,800, (c) $5, (d) $1.40.

N. J., Cape May—Garbage Incinerator—Bureau Yards and Docks, Navy Dept., Wash., received low bids, from Morse Boulger Destruction Co., 39 Cortlandt St., New York City, $7500; W. F. Kemp, 6426 Loomis St., Chicago, $9985.

Pa., Ft. Mifflin — Buildings — Bureau Yards and Docks, Navy Dept., Wash., received low bids building addition to Building No. 62, also new steel building, (a) 50 x 150 ft., (b) 20 x 80 ft., from Monahan & Losse, Inc., 3016 Chestnut St., Phila., (a) $11,562, (b) $3548; George & Borst, 277 South 11th St., Phila., (a) $14,489. Noted Nov. 15.

★Pa., Hollidaysburg—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract, to King Lumber Co., Charlottesville, Va., $62,000. Noted Nov. 8.

Pa., Phila.—Filling out Pier and Bulkhead Wall—Bureau Yards and Docks, Navy Dept., received low bids filling out pier and bulkhead wall at Navy Yard, Specification No. 2692, unit prices, items 1 to 16, Snare & Triest Co., 232 Bway., New York

Federal Government Work (Continued)

City, Item 1, $.55; 2, $85; 3, $95; 3b, $165; 3c, $110; 3d, $100; 4, $15.50; 4b, $18; 4c, $15; 4d, $8; 4e, $10; 5, $115; 6a and c, $.10; 6d, $.18; 6e and f, $.10; 7a and e, $.07; 7f, $.10; g and h, $.08; 8a, $.05; b, $.07; c and d, $.10; e, $30; f, $4500; g, $275; 9, $.70; 10a, $.14; 11a, $35; 12, $25; 13, $25; 14, $.50; 16, $300; Degnon Constr. Co., 68 Hunters Point Ave., Long Island City, 1a, $.50; b and c, $.60; Item 2, $160; 3a and d, $110; 4a, $15; Item 5, $160; 6a, $12; 7a, $12; 8a, $.05; 9, $.75; 10a and b, $.30; 11a, $60; 12, $20; 13, $20; 14, $.50; Maryland Dredging Co., 1515 Fidelity Bldg., Baltimore, Md., 1a, $.65; 2, $120; 3a, $150; 4a, $17; 5, $140; 6a and f, $.15; 7a and g, $.10; 8a, $.05; 9, $1; 10a and b, $.30 each, 11a and c, $50; 12, $25; 13, $5; 14, $.42. Noted Nov. 8.

Pa., Phila.—Railroad Turntable—Bureau Yards and Docks, Navy Dept., Wash., received only bid (work complete) from Amer. Bridge Co., 600 Cont. Trust Bldg., Baltimore, $7200.

Pa., Phila.—2 Sprinklers—Bureau Yards and Docks, Navy Dept., Wash., received only bid furnishing under Specification No. 2648, from General Fire Extinguisher Co., 275 West Exchange St., Providence, R. I., (1) $10,272; (2) $5807; (3) $4465.

Pa., Phila.—Tank and Tower—Bureau Yards and Docks, Navy Dept., Wash., reived low bids building steel water tank and tower, (a) work complete, (b) alternate bids from Memphis Steel Constr. Co., Magee Bldg., Pittsburgh, (a) $16,864, (a1) $16,315, (b) $16,078, (b1) $15,529; Aetna Steel Products Co., 30 Church St., New York City, (a) $21,500; Chicago Bridge & Constr. Co., New York, (a) $22,500, (b) $18,200.

Md., Indian Head—New Dock and Railroad—Bureau Yards and Docks, Navy Dept., Wash., received low bids, unit prices, from McLean Constr. Co., Fidelity Bldg., Baltimore, (a) $300 per acre, (b) $.83, (c) $4.75, (d) $1000, (e) $3, (f) $40, (g) $12, (h) $.50, (i) $15.00; W. J. Torrington, Weightman Bldg., Phila., (a) $2, (b) $86,-250, (c) $44,598, (d) $11,000, (e) $90,600, (f) $2500, (g) $4465, (h) $675,000, (i) $1000. Noted Nov. 8.

Wash., D. C.—Addition to Forge Shop—Bureau Yards and Docks, Navy Dept., received low bids building at Navy Yard, (a) work complete, (b) per lin.ft. for piles, (c) addition for removal of roof, from Boyle Robertson Constr. Co., Evans Bldg., (a) $117,874; (b) $.45 add, (c) $124,705; A. C. Moses Constr. Co., 916 New York Ave., (a) $119,200, (b) $1531 add.; M. A. Weller Co., 816 14th St., (a) $121,477. Noted Nov. 8.

Wash., D. C.—Fitting out Cranes—Bureau Yards and Docks, Navy Dept., Wash., received low bids for 3 electrically operated fitting out cranes of 350 gross ton capacity at Navy Yards, Norfolk, Va., New York and Phila., as follows: (a) Work complete; (b) modification of Drawing No. 68,193 (under this item bids may be submitted for cranes of two or more operations controlled by single motor by means of suitable clutches; (c) one crane in accordance with drawing No. 68,193; (d) one crane drawing No. 68,193 Navy Yard, Philadelphia; (e) one crane drawing No. 68,193, Navy Yard, Norfolk, Va.; (f) modifications of (e); (g) one crane drawing No. 68,193, Navy Yard, New York: Wellman-Seaver-Morgan Co., 7000 Central Ave. S. E., Cleveland, Ohio, (a) $2,414,000, (c) $836,900, (e) $836,900, (g) $836,900; McMyler, Interstate Co., 50 Church St., New York City, (b) $2,449,975, (d) $840,325, (f) $843,925, (b) $2,409,975, (d) $827,771, (f) $831,371; Webb & Ryan, New York, N. Y., cost plus %; informal, no check with bid. Noted Oct. 18.

★Wash., D. C.—Hospitals—War Dept., Brig. Genl. I. W. Littell, let contract building 24 hospitals at Walter Redd Army General Hospital, to Skinker & Garrett, Kellogg Bldg., cost plus percentage.

Wash., D. C.—Pier and Bulkhead—Bureau Yards and Docks, Navy Dept., received low bids building at Hampton Roads; Specification No. 2690, from H. P. Converse Co., 88 Broad St., Boston, Mass., Item 1, $.26; 2, $119.50; 3, $87.10; 4, $150; 5a, $.0865; b, $.0865; 6, $.0524; 7a, $.76; 8a, $133.25; 9, $94.02; 10, $157.08; 11, $.088; 12, $.055; 17, $.80; 18a, $71.50; 19a, $143.-50; 20, $9.92; 21a, $108.28; 22, $170; 23a, $.086; 24a, $.075; 25a, $102.08; 26a, $.364; 27, $.30; 28a, $1.14; 29a, $.23; 30, $.085; J. Stewart & Co., 30 Church St., New York City, Item 1, $.38; 2, $123; 3, $85; 4, $136; 5a, $10; 6, $.07; 8a, $134; 9, $94; 10, $146; 11a, $10; 12, $.07; 17a, b, c, d, e, f, g, $.90 each; 18a-b, $88 each; 19a to f, $130 each; 20a, $8; 21a, $107; 22, $140; 23a, $10; 24a, $10; 25a, $117; 26a, $.36; 28a-b, $1 each; 29, $.18; 30, $.04. Noted Nov. 8.

Wash., D. C.—Refrigerating plant and Brine Circulating System—Bureau Yards and Docks, Navy Dept., Wash., received low bids (a) work complete, (b) alternate, (c) omitting for ammonia compressor and brine, circulating pump, (d) omission under (b); Automatic Refrigerator Co., 89 Willow St., Hartford, Conn., (b) $6850, (d) $2350; York Mfg. Co., York, Pa., (b) $7360, (d) $1350; Boyer Machine & Ice Co. Jersey City, N. J., (b) $7770, (d) $1050. Noted Nov. 1.

★Wash., D. C. — Storehouse — Bureau Yards and Docks, Navy Dept., Wash., let contract building general storehouse, 1 covered annex with crane runway and alteration to present building No. 28, to Faribault Bldg. Corp., 15 Park Row, New York City, $376,751. Noted Nov. 8.

★Wash., D. C.—Structural Steel—Bureau Yards and Docks, Navy Dept., Wash., let contract for structural steel for seaplane hangar, Hampton Roads, Va., to Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, Pa., $19,312. Noted Nov. 15.

★Va., Farmville—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract, to J. A. Stewart, South Boston, Va., $46,400. Noted Nov. 8.

W. Va., Charleston—Electric Power Distributing System—Bureau Yards and Docks, Navy Dept., Wash., received low bids building at U. S. Naval Projectile Plant, from G. E. Eng. Co., 417 Canal St., New York City, $26,711; Carroll Electric Co., 714 12th St., Wash., D. C., $29,700; E. S. Downs Co., 756 Broad St., Newark, N. J., $29,987.

★N. C., Burlington — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., let contract, to W. H. Stillwell, Savannah, Ga., $55,208. Noted Nov. 15.

★S. C., Charleston—Automatic Sprinkler System—Bureau Yards and Docks, Navy Dept., Wash., let contract installing in general storehouse, to Rockwood Sprinkler Co., 275 West Exchange St., Providence, R. I., $6935. Noted Nov. 8.

S. C., Charleston—Steel Tower—Bureau Yards and Docks, Navy Dept., Wash., building 300 ft. steel tower and reinforcing 2 existing steel towers at Navy Yard, (a) net price per lb. steel, (b) net price per lb. new tower, (c) per lb. steel, 2 existing towers, (d) alternate, (e) insulators installed, (f) winch and rope installed, (g) lightning protection installed, (h) snatch blocks, eyebolt shackles installed, from Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, (a) .1749, (b) .1749, (c) .2572, (d) .2572, (e) $1400, (f) $275, (g) $175, (h) $140; Independent Bridge Co., Beaver and Rebecca St., Pittsburgh, (b) .175, (d) .215, (e) $1350, (f) $200, (g) $150, (h) $150. Aetna Steel Products Co., 30 Church St., New York City, (a) $9.89 per 100 lb., (b) $10.40, (c) $11.60, (d) $12.00, (e) $30, (f) $420, (g) $100. Noted Oct. 25.

Ga., Forsyth — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids from J. H. B. Wilder, Columbus Rd., Macon, $36,697; J. N. Boston, Marion, Ky., $40,340; W. J. Brent, 506 Bd. Trade Bldg., Norfolk, Va., $41,506. Noted Oct. 11.

★Miss., Gulfport—Emergency Camp—Bureau Yards and Docks, Navy Dept., Wash., let contract, to Paschen Bros., 1426 Conway Bldg., Chicago, $408,000. Noted Nov. 8.

★Miss., Gulfport—Emergency Hospital—Bureau Yards and Docks, Navy Dept., Wash., let contract, to W. T. Hadlow & Co., Baldwin Bldg., Jacksonville, Fla., $101,650. Noted Nov. 8.

★Ky., Louisville—Power House — U. S. Engr., Louisville, let contract building at Lock No. 41, to National Concrete Constr. Co., Bd. of Trade Bldg., $7691. Noted Oct. 4.

★O., Dayton—Experimental Station—Bureau Yards and Docks, Navy Dept., Wash., let contract building at McCook Field, to Dayton Lumber & Mfg. Co., Clinton and Bacon St., $200,000.

★Ind., Valparaiso—Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to Clarke Constr. Co., Danville, Ill., $70,711. Noted Oct. 4.

★Mich., St. Joseph—Revetment — U. S. Engr. Office, Detroit, let contract for repairs to revetment at St. Joseph Harbor, to I. J. Lyons, St. Joseph, $25,995.

Mo., Harrisonville — Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, from F. H. Latimer, Kansas City, $57,778; T. W. Cissell, Newark, O., $58,383; W. D. Lovell, 1415 Southeast 8th St., Minneapolis, Minn., $61,300. Noted Oct. 11.

Tex., Austin—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids from Welsh & Birney, Austin, $22,806; W. Grohne Constr. Co., Joliet, Ill., $26,850; Trinity Constr. Co., Austin, Tex., $28,500. Noted Oct. 11.

Cal., San Diego—Depot—Bureau Yards and Docks, Navy Dept., Wash., received low bids building naval coal depot, San Diego Harbor, as follows: (a) 9554 cu.yd. excav., (b) 1403 cu.yd. rein.-con. for pump pit, (c) 293,200 lb. reinforcing steel; (d) 12,000 lb. miscellaneous metal work; (e) building as specified; (f) mechanical and electrical equipment; (g) piping; (h) lighting and power, (i) alternative foam fire protection system; (j) tests, from J. W. Danforth Co., 70 Elliott St., Buffalo, N. Y., (a) 70c.; (b) $18; (c) $5.75; (d) 25c.; (e) $30,000; (f) $170,786; (g) $79,947; (h) $5700; (i) $19,434; (j) $1000; Connors Bros. Co., 156 East 102nd St., New York City, (a) $2.50; (b) $30; (c) 15c.; (d) 20c.; (e) $40,000; (f) $120,000; (g) $131,-000; (h) $18,000; (i) $3000; C. C. Moore & Co., Sheldon Bldg., San Francisco, (a) $.835; (b) $17.60; (c) $.62; (d) $.11; (e) $22,000; (f) $180,000; (g) $72,000; (h) $6325; (i) $300; Turner Co., 272 Natma St., San Francisco, (a) 60c.; (b) $15; (c) $6.75; (d) $.165; (e) $27,670; (f) $149,600; (g) $101,200; (h) $8200; (i) $12,600; (j) $2000.

★Cal., Mare Island—(Vallejo P. O.)—Structures—Bureau Yards and Docks, Navy Dept., Wash., let contract building structures for submarine base, to Clinton Constr. Co., 140 Townsend St., San Francisco, $86,-250. Noted Nov. 15.

MISCELLANEOUS

Proposed Work

Garbage Disposal Plant—Johnstown, Pa.—(Official)—City voted $75,000 bonds to build garbage disposal plant. J. R. Crissey, city engr. Noted Oct. 18.

Dock—Cleveland, O.—Cleveland Builders' Supply Co., Leader-News Bldg., plans to build 600-ft. rein.-con. loading and unloading dock, foot East 49th St.

Dam—Phoenix, Ariz. — See "Excavation and Dredging."

BIDS DESIRED

Retaining Wall—Greenfield, Ind. — See "Excavation and Dredging."

Portland Cement—Minneapolis, Minn.—Until Nov. 28, by City, furnishing 100,000 bbl. portland cement. F. W. Capplin, city engr.

Dam—Tex., San Angelo—See "Water-Works."

Steam Pipe and Fittings—San Jose, Cal.—Until Dec. 3, by H. A. Pfister, clk., Santa Clara Co., furnishing wrought iron steam pipe and fittings at county almshouse.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Duct Line—New York, N. Y.—Pub. Serv. Comn. let contract, duct line for 7th Ave.-Lexington Ave. Rapid Transit R.R., consisting of 32 ducts extending under Westchester Ave. and Bronx River (Bronx Boro.), to Underpinning & Foundation Co., 290 Bway., $47,113. Noted Nov. 15.

★Coal Pockets — Phila., Pa.—Phila. & Reading R.R. let contract for rein.-con. coal pockets, Erie and Lawrence St., to Roberts-Schaefer Co., Chicago, $170,000.

River Channel Improvements—Columbus, O.—(Official)—G. A. Borden, dir. pub. serv., received low bids widening Scioto River, including building levees, bridges and (a) concrete balustrade, (b) stone balustrade, from J. B. Sheets & Co., Pittsburgh, Pa., (a) $2,358,859, (b) $2,361,379; R. H. Evans Co., Savings Bank Bldg., Columbus, (a) $2,600,350, (b) $2,616,537; W. E. Callahan Constr. Co., 1517-18 Citizens Natl. Bank Bldg., Omaha, Neb., (a) $2,248,811, (b) $2,-262,980. Noted Oct. 25.

Flood Control Works—Dayton, O.—(Official)—E. M. Kuhns, secy. bd. dir. Miami Conservancy Dist., received bids Nov. 15, building dams and appurtenances for flood-control works (12 contracts), from H. P. Converse & Co., 88 Broad St., Boston, Mass.; United Dredging Co., Seattle, Wash., R. H. & G. A. McWilliams, 998 Crete St., Chicago; Parsons Constr. Co., Security Bldg., Binghamton, N. Y.; M. C. Connors & Co., 601 West Madison St., Chicago; Winston & Co., 12 North 7th St., Richmond, Va. All proposals were rejected excepting Contracts Nos. 41, 43 and 45 of R. H. & G. A. McWilliams, which will be held for further consideration. Noted Sept. 13.

★Incinerating Plant—Kansas City, Mo.—City let contract, Grand Ave. and Front St., to Decarie Co., c/o Kansas City Eng. Co., Scarritt Bldg., $129,957.

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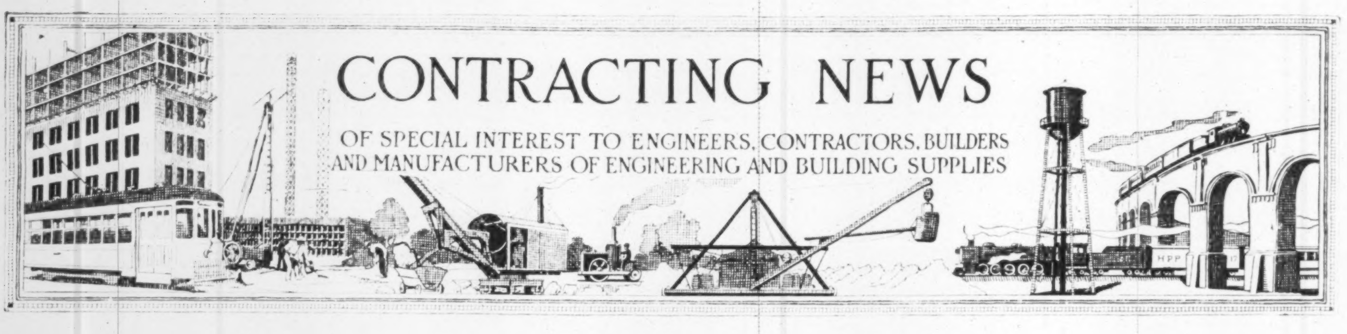


CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 15 to 19 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Dec. 3.	Winnipeg, Man.	Nov. 8
Dec. 4.	Laurel, Mont	Nov. 29
Dec. 5.	Red Bank, N. J. Adv. Nov. 22.	Nov. 22
Dec. 5.	Jackson, Mich. Adv. Nov. 29.	Nov. 29
Dec. 20.	Wooster, Ohio Adv. Nov. 29.	Nov. 29

SEWERS

Bids Close		See Eng. News-Record
Dec. 5.	Elyria, Ohio	Nov. 29
Dec. 10.	Lake Andes, S. D.	Nov. 22
Dec. 30.	Rocky River, Ohio	Nov. 29

BRIDGES

Bids Close		See Eng. News-Record
Dec. 3.	Akron, O.	Nov. 22
Dec. 3.	Laurel, Miss	Nov. 22
Dec 4	West Palm Beach, Fla. Adv. Nov. 8 and 29	Nov. 8
Dec. 10.	St. Augustine, Fla.	Nov. 15
Dec. 10.	St. Paul, Neb.	Nov. 29
Dec. 11.	Nelson, Pa.	Nov. 29
Dec. 12.	New York, N. Y.	Nov. 22
Dec. 21	Kansas City, Mo. Adv. Nov. 29.	Nov. 29
Dec 22.	Livingston, Ala.	Nov. 29

STREETS AND ROADS

Bids Close		See Eng. News-Record
Dec. 3.	Scottsboro, Ala.	Nov. 15
Dec. 3	Washington	Nov. 22
Dec. 3.	Stanberry, Mo.	Nov. 22
Dec. 3.	San Diego, Cal.	Nov. 29
Dec. 3.	Eastville, Va.	Nov. 29
Dec. 3.	Kearney, Neb.	Nov. 29
Dec. 4.	Yreka, Cal.	Nov. 29
Dec. 4.	Elizabeth, N. J.	Nov. 29
Dec. 4.	Woodville, Miss.	Nov. 29
Dec. 4.	Tuscumbia, Ala	Nov. 8
Dec. 4.	Columbus, Neb.	Nov. 15
Dec. 4.	Jefferson, Ia.	Nov. 29
Dec. 5.	Red Wing, Minn.	Nov 15
Dec. 5.	Santa Ana, Cal.	Nov. 22
Dec 6.	Jefferson City, Mo.	Nov. 29
Dec. 10.	Washington	Nov 29
Dec. 10.	Gilmer, Tex.	Nov. 29
Dec. 11.	St. James, Minn.	Nov. 22
Dec. 11.	Granite Falls, Minn.	Nov. 22
Dec. 11.	Geneva, Ala.	Nov. 29
Dec. 11.	Pennsylvania Adv. Nov. 29.	Nov. 29
Dec. 12.	Anderson, Ind.	Nov. 29
Dec. 15.	Jasper, Ala.	Nov. 29
Dec. 15.	Fitchburg, Mass. Adv. Nov. 29	Nov. 29
Dec. 27	Elizabeth, N. J.	Nov. 29

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Dec. 4.	Salina, Kan.	Nov. 15
Dec. 4.	Litchfield, Minn.	Nov. 29
Dec. 5.	Anderson, Ind.	Nov. 29
Dec. 6.	Marion, O. Adv. Nov. 8.	Nov. 8
Dec. 10.	Clarion, Ia.	Nov. 29
Dec. 14.	El Centro, Cal.	Nov. 29
Dec. 20.	Albany, N. Y. Adv. Nov. 29.	Nov. 29

BUILDINGS

Close Bids		News-Record See Eng.
Dec. 1.	Nashua, N. H.	Nov. 29
Dec. 1.	Norfolk, Va.	Sept. 13
Dec. 1.	Glenville, W. Va.	Nov. 8
Dec. 3.	Olympia, Wash.	Nov. 15
Dec. 4.	Patton, Cal.	Nov. 29
Dec. 4.	Miami, Fla.	Nov. 29
Dec. 8.	Suffern, N. Y.	Nov. 22
Dec. 10.	East Cleveland (Cleveland P. O.) O.	Nov. 22
Dec. 15.	Gallup, N. M.	Nov. 29
Dec. 17.	Kenmore, Ohio	Nov. 29
Dec. 17.	New Paltz, N. Y. Adv. Nov. 29	Nov. 29
Dec. 17.	Pittsburgh, Kan.	Nov. 29
Dec. 18.	Kansas City, Mo. Adv. Nov. 29	Nov. 29
Jan. 1.	Wichita, Kan.	Nov. 22
Jan. 15.	New York, N. Y.	Nov. 29

INDUSTRIAL WORKS

Close Bids		News-Record See Eng.
Dec. 11.	Albany, N. Y. Adv. Nov. 29	Nov. 29

FEDERAL GOVERNMENT WORK

Close Bids		News-Record See Eng.
Nov. 30.	Dredging — New York, N. Y.	Nov. 29
Nov. 30.	Shop—New London, Conn.	Nov. 22
Dec. 3.	Incinerator — Mare Island (Vallejo P. O.) Cal.	Nov. 15
Dec. 3.	Dredging—Melville, R. I.	Nov. 22
Dec. 3.	Removal of Wall — New London, Conn.	Nov. 29
Dec. 3.	Surveying Instruments — Washington, D. C. Adv. Nov. 29.	Nov. 29
Dec. 3.	Grading — Wash., D. C. Adv. Nov. 29	Nov. 29
Dec. 3.	Pattern Shop — Washington, D. C.	Nov. 22
Dec. 5.	Post Office—Decatur, Ala.	Nov. 1
Dec. 5.	Bulkhead — New Orleans, La.	Nov. 8
Dec. 6.	Tank and Tower — Key West, Fla.	Nov. 29
Dec. 10.	Foam Fire Protection — Guantanoma, Cuba	Nov. 8
Dec. 10.	Heating System — Phila., Pa.	Nov. 15
Dec. 10.	Refrigerating Apparatus, etc.—Washington, D. C. Adv. Nov. 22.	Nov. 22
Dec. 10.	Heating System—Philadelphia, Pa.	Nov. 22
Dec. 10.	Cranes—Philadelphia, Pa.	Nov. 29
Dec. 10.	Piping, etc.—Philadelphia, Pa.	Nov. 29
Dec. 10.	Cranes — New London, Conn.	Nov. 29
Dec. 10.	Garage—Newport, R. I.	Nov. 29
Dec. 12.	Bridge—Fairmont, W. Va. Adv. Nov. 29	Nov. 29
Dec. 14.	Rip Rap—Galveston, Tex. Adv. Nov. 29.	Nov. 29
Dec. 17.	Post Office—Denton, Tex.	Nov. 8
Dec. 17.	Wharf and Boathouse—Santa Rosa, Fla. Adv. Nov. 29	Nov. 29
Dec. 18.	Laterals — Torrington, Wyo.	Nov. 1
Dec. 21.	Dredging — Philadelphia, Pa.	Nov. 29
Dec. 27.	Post Office — Alexandria, La. Adv. Nov. 22 and 29.	Nov. 22

MISCELLANEOUS

Bids Close		See Eng. News-Record
Dec. 3.	Steam Pipe and Fittings—San Jose, Cal.	Nov. 22
Dec. 4.	Plumbing and Electrical Work—Philadelphia, Pa. Adv. Nov. 29.	Nov. 29
Jan. 2.	Improving Harbor — Newport, Ore.	Nov. 29

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., Coxsackie—Village having plans prepared by M. Vrooman, engr., West Main St., Gloversville, for filtration plant and dam. About $37,000. Noted Nov. 22.

N. Y., Olean—City lets contract about Dec. 5 building filtration plant, including 6 motor-driven centrifugal pumps, concrete mixing chambers, coagulating basins, filters, clearwell, brick operating basins, etc. About $75,000. E. H. Atwood, c/o. Vacuum Oil Co., engr. Noted Nov. 1.

N. J., Pitman—Boro. officials plans to purchase water-works of Pitman Water Co. for $48,000 and will extend and improve same.

Pa., Allentown—City plans to build 12-in. water main on Auburn St. from Liberty St. westward, about 2694 ft. long. About $10,755. C. D. Weisbach, city engr.

Pa., McKeesport—Boro. having plans prepared for new water-works to distribute water to Glassport and other boros. J. M Smith, boro. engr.

Pa., Mt. Joy—Boro. had plans prepared building concrete filtration plant. About $15,000. Gannott, Seelye & Fleming, 204 Locust St., Harrisburg, engrs., soon let contract. Noted Aug. 23.

Va., Norfolk—City plans to issue $100,000 bonds to enlarge and improve water system. W. H. Taylor, Jr., city engr.

Ga., Decatur—(Official) — City election Dec. 5, to vote on $15,000 bond issue to build water system. E. S. Jordan, clk.

Tenn., Copperhill—(Official)—City to sell $10,000 bonds Dec. 1 to build water and sewerage systems. C. F. Hunter, clk.

Ky., Lawrenceburg—(Official)—City lets contract in spring, building addition to filtration plant. Cost between $13,000 and $15,000. C. A. Leathus, clk. Noted Nov. 15.

O., Cuyahoga Falls—See "Sewers."

O., Hamilton—City plans to improve water-works system. About $18,000. F. E. Weaver, city engr.

O., Maumee—City sold $10,500 bonds to extend water-works.

O., Maysville—City plans to build reservoir, 1,000,000 gal. capacity. A. D. Hewitt clk.

Ill., Wilmette—(Official)—City soon lets contract for 5000 ft. water pipe trenches 5 ft. deep. B. E. Gage, mgr. Wilemette Park Dist.

Wis., Gresham—City voted $14,000 bonds to build water system and electric light plant.

Wis., Hartford—City having plans prepared by A. Martin, engr., Hartford, for pump house and reservoir. About $20,000. Noted Nov. 8.

Water-Works (Continued)

Wis., Hurley—City voted $360,000 bonds to build water system.

Wis., Manitowoc—See "Streets and Roads."

Wis., Milwaukee—(Official)—City Council defeated project to build water purification plant. Noted Nov. 15.

Wis., Sparta—City soon lets contract drilling 10-16-in. well, 300 ft. deep. W. G. Kirchoffer, Madison, engr.

Kan., Chanute—City plans to improve water system including elevated tower of 250,000 gal. capacity, 7600 ft. 16-in. c.-i. pipes. About $42,000. C. Pratt, city engr.

Kan., Waverly—City plans to issue $11,000 bonds to install new engine and pump at water-works and repair reservoir.

N. D., Belfield—City plans to install water system. About $30,000.

Wyo., Lusk—City plans election Dec. 18 to vote on $12,000 bond issue for water-works system. D. E. Goddard, clk.

Mo., Kansas City—City plans to lay 48 in. water main, 22,000 ft. long, on Nicholson and Monroe Sts. About $500,000. First unit to cost $10,000. R. W. Stalnaker, secy. water & fire bd.

Mo., Kansas City—Water Bd. plans to build water pumping station in East Bottoms to have 20,000,000-gal. capacity. C. Hill, city engr. Noted Nov. 8.

Mo., Maysville—City plans to build reservoir, 1,000,000 gal. capacity. A. D. Hewitt, clk.

Tex., Crosbyton—(Official)—City having plans prepared by H. E. Elrod, engr., Interurban Bldg., Dallas, building water system.

Tex., Quenah—(Official)—City having plans prepared by H. E. Elrod, engr., Interurban Bldg., Dallas, building water system. About $150,000. Noted Oct. 18.

Tex., San Marcos—San Marcos Utilities Co., San Marcos, plans to improve water-works system and electric-light plant. About $20,000.

Okla., Altus—City election Dec. 4 to vote on $80,000 bond issue to extend and improve water-works. E. Morgan, clk.

Okla., Buffalo—City plans to build water system.

Okla., Cyril—City election soon to vote on $20,000 bond issue to build water system. A. W. Funnell, pres.

Okla., Madill—City voted $65,000 bonds to build water system. Noted Nov. 1.

Okla., Sulphur—City voted $10,000 bonds to build water system. Noted Nov. 22.

Utah, Brigham—City rejected bids improving water system. Work will be readvertised. Noted Oct. 4

Ariz., Globe—(Official)—City postponed election until next May to vote on $435,000 bond issue for addition to water system and improvements to sewers. Noted July 26.

Ariz., Williams—Town voted $55,000 bond issue for water-works system at recent election. Noted Oct. 4.

Ariz., Yuma—City election Dec. 11 to vote on $400,000 bond issue to build water, gas, electric-light, heat and power systems.

Cal., Napa—State Bd. Control, Sacramento, plans to build water system here to provide water for State Hospital, Fry and Smith-Brown Ranches, and Veterans' Home. M. De Motte, chn. About $70,000.

Cal., Seal Beach—City voted $15,000 bonds to build water system. Noted Oct. 4.

Cal., Vallejo—City had plans prepared by F. H. Tibbets, engr., Alaska Commercial Bldg., San Francisco, building reservoir, 273,000,000-gal. capacity, to supply water for Green Valley. About $200,000. Noted July 12.

Ont., London—City plans to extend water mains to new soldiers' hospital in county. About $25,000. E. V. Buchanan, City Hall, mgr. utilities comrs.

BIDS DESIRE

N. Y., New York—Until Dec. 3, by W. Williams, comr. water supply, gas and Electricity, Municipal Bldg., hauling and laying water mains and appurtenances to cross-connect existing mains in Southern Blvd., from East 163rd St. to East 181st St. (Bronx Boro.)

O., Wooster—(Official)—Until Dec. 20, by Dir. Pub. Serv. improving water system. W. J. Sherman Co., Nasby Bldg., Toledo, engrs.; advertised in this issue.

Mich., Jackson—(Official)—Until Dec. 5 by A. W. D. Hall, city mgr., drilling 4 wells; advertised in this issue.

Mont., Laurel—Until Dec. 4, by city, building intake in Yellowstone River for water system. G. A. Allen, clk. B. C. Lillis, 239 Clark Ave., Billings, engr.

PRICES AND CONTRACTS AWARDED

S. C., Columbia—City received low bids installing one 3,000,000-gal. and two 5,000,000-gal. centrifugal pumps in pumping station, from Earle Gear & Machine Co., Stinton and Wyoming Aves., Phila., $5532; Morris Machine Works, 41 Cortlandt St., New York City, $5550; Matthews Electric Co., $6000. Noted Nov. 15.

★Neb., Hoskins—City let contract for engine and pump for water system to Merkle Machinery Co., 1020 Woodmen of World Bldg., Omaha; tower and tank to Steel Structural Wks.; pumphouse, to Farmers' Lumber Co., Hoskins. About $10,000. Noted Oct. 25.

Wash., Bremerton—City received low bids building concrete reservoir for water system, from W. B. Lance, Northern Bank Bldg., Seattle, $39,456; W. O. Pulett, Bremerton, $41,513; Swenson & Co., Arcade Bldg., Seattle, $45,592. Noted June 14.

Cal., Long Beach—See "Sewers."

SEWERS

Proposed Work

Conn., Bristol—City plans to install new septic or Imhoff tanks, new filtration beds, and general improvements to sewage disposal system. About $100,000. Sperry & Buell, Main St., city engrs.

Conn., Stratford—City plans to install sewerage system and sewage disposal plant. About $250,000. C. Potts, 30 Church St., New York City, engr. Noted Oct. 18.

N. Y., Brooklyn—Boro. plans to build sewers in Ave. M, East 3rd, East 4th and 60th Sts., Ocean Pkway. and 23rd Ave. About $44,000. L. H. Pounds, pres.

N. Y., Long Island City—Boro. plans to build sewer in Grand St. from Queens Blvd. to Long Island R.R. About $20,500. M. M. Connolly, pres.

N. J., Jersey City—(Official)—City rejected bids for 18 in. vitr. pipe sewer in portion Summit Ave. About $12,366. Work will be readvertised. C. A. Van Kuren, city engr. Noted Nov. 1.

N. J., Trenton—City plans to install sewerage system in Riverside Park. About $19,732. J. R. Fell, Jr., city engr.

Pa., Johnstown—City having plans prepared by Gannett, Seelye & Fleming, engrs., 204 Locust St., Harrisburg, for sanitary sewerage system; $500,000 bonds voted for work. Noted Nov. 22.

Pa., Lansford—City voted $50,000 bonds to build sewers, parks and street improvements. J. B. Warriner, city engr. Noted Sept. 27.

Del., Laurel—City plans election to vote on $60,000 bond issue to build sewerage system and improve streets.

N. C., Gastonia—City plans to build sewage-disposal plant. L. M. Ross, city engr.

Tenn., Copperhill—See "Water-Works."

Ky., Maysville—City defeated $100,000 bonds to build sewerage system. Noted Sept. 13.

Ky., Paris—(Official)—City voted $20,000 bonds to build sewerage system. J. W. Hayden, city clk.

O., Cincinnati—City plans to issue $54,500 bonds to improve sewers. F. S. Krug, city engr.

O., Cuyahoga Falls—Silver Lake Impvt. Co., Flatiron Bldg., Akron, having plans prepared by Courtney Eng. Co., Leader-News Bldg., Cleveland, building sewers and water main connections. About $100,000.

O., Newport—City plans to build trunk sewer in York St. from Ohio River to 8th St. About $25,000. J. Herman, comr. pub. wks.

Ind., Frankfort—City having plans prepared building storm sewer in West Washington St. C. C. Hoffine, city engr.

Ind., Union City—City soon lets contract building sewers. About $18,000. C. E. Hollinger, Greenville, O., engr.

Ill., Springfield—City plans to lay sewers on 17th St. from Laurel to Ash St.; Ash St. from 16th to 17th St.; Moffatt Ave. from 15th to East Grand Ave.; also having plans prepared for sewer to be laid from Walnut and Mason St. to Lincoln Ave. About $150,000. W. D. Seeley, city engr.

Wis., Manitowoc—See "Streets and Roads."

Wis., South Milwaukee—City soon lets contract, 3½ mi. sanitary sewers in Dist. No. 3, involving 8-24-in. vitr. pipe, 250 ft., 16-in. c.-i. pipe. About $30,000. Alvord & Burdick, 8 South Dearborn St., Chicago, engr.

Minn., Lamberton—City plans to build sewerage system. A. L. & E. W. Goldenstar, Mankato, engrs.

Minn., Mankato—City having plans prepared by M. M. Cram, engr., Mankato, for sanitary sewerage system. J. H. A. Brahtz, 312 Commercial Bldg., St. Paul, cons. engr.

Minn., Melrose—Village soon lets contract building sewerage system, involving about 5200 ft. 12-in. vitr. tile. Chute & Bradley, St. Cloud, engrs.

Minn., Winnebago—Village having plans prepared by C. H. Currie, engr., Webster, Ia., for storm sewerage system. About $60,000.

Mo., Carthage—City Council having preliminary plans prepared by E. B. Newton, city engr., for lateral sewer in Dist. No. 29, embracing territory between Lyon and Forest Sts. on Wiggins and Macon Sts.

Mo., Kansas City—City having plans prepared building Blue River sanitary sewer. About $750,000. A. G. Ludlow, engr. bd. pub. wks.

Okla., Tulsa—City received no bids building storm sewer on Trenton St. from 3rd to Katy St. New bids. H. H. Wyss, city clk.

Colo., Gunnison—City plans to extend sewers in southern part of city.

N. M., East Las Vegas—City plans to install sewerage system. About $29,478. V. K. Jones, city engr.

Ariz., Globe—See "Water-Works."

Wash., Camas—City had plans prepared for uphill sewerage system. H. G. Ausplund, city engr.

Cal., Seal Beach—City voted $15,000 bonds to build sewerage system. Noted Oct. 4.

N. S., Pictou—(Official)—Town plans to build sewers on Water, Church and Front Sts. About $60,000.

BIDS DESIRED

O., Elyria—(Official)—Until Dec. 5, by M. M. Wilcox, dir. pub. serv., building sewers in Dilworth St. from Gulf to Harwood Sts.; Harwood St. from Caroline St. to north line of Dilworth allotment. C. M. Theobald, city engr. Noted Nov. 15.

O., Rocky River—Until Dec. 30, by F. Mitchell, village clk., building sanitary and storm sewers. About $46,000. R. W. Pratt, Hippodrome Bldg., Cleveland, engr. Noted Nov. 15.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★O., Canton—City let contract building central southwest storm sewer, rein.-con. pipe, to F. A. Downs Constr. Co., Lawrence Rd. and Gibbs Ave., $81,180; Crystal Park storm water sewer, to Burd Constr. Co., 1045 Spring Ave., $16,675. Noted Nov. 1.

★Mich., Highland Park—(Official)—Village received no bids Nov. 19, building sewers in Goodwin Ave., between Connecticut Ave. and southerly village limits; in alley between Cardoni and Russell Sts. in Connecticut Ave. from Oakland to Russell St., and Russell St. from Connecticut Ave. to alley south of Greenwood Ave. Work will be done by day labor. Noted Nov. 8.

★Mich., Port Huron—City let contract building main sewer line in Howard St. from 16th to 20th Sts., to Carpenter Constr. Co., 707 Ford Bldg., Detroit. About $16,565.

Mich., Saginaw—City received low bids building sewers on Webber St. from Jefferson Ave. to Macauley St., from Eddy & Leaman; on Webber St. from Macauley to Sheridan Ave., and on Macauley St. from Webber to Hiland St., W. Eddy & Son; on Hiland St. from Jefferson to Macauley St., P. Sager, Saginaw. Noted Nov. 8.

★Minn., Brainerd—City let contract building lateral sewers in Dist. No. 3, involving about 44,129 ft. 8- to 10-in. tile to Sherlund Co., Brainerd. Noted Nov. 1.

Sewers (Continued)

★Neb., Lincoln—(Official)—City let contract building 24-in. sanitary sewer from 20th and Vine Sts. to Salt Creek along west bank of Antelope Creek, to J. M. Deffenbaugh, Lincoln, $13,335. Noted Nov. 15.

★Neb., Omaha—City let contract building sewers in Dists. Nos. 353 and 357, to A. Beck, 208 Keeline Bldg. About $26,992 and $17,792, respectively.

★Mo., Kansas City—City let contract building sewer in Dist. No. 2, to Hoover Bros., 18th and Tracy Sts., $59,075.

★Wash., Lind—City let contract for sewerage system, including 21,000 ft. 6-12-in. pipe, to J. B. Romana, 3314 16th Ave., Seattle. $48,150. Noted Oct. 11.

Cal., Long Beach—City received only bid building vitr. clay sewers in State, 20th, 21st and Willard Sts., and Locust Ave., and in certain alleys, together with Class "A" brick flush tanks, Class "C" brick manholes, rein.-con. pumping station, centrifugal pumps, electrical motors, piping, iron frame covers, Y and T branches, water connections, water meters, automatic flushing siphons, etc., from J. Kennedy, Washington Bldg., Los Angeles, $56,250.

★Cal., Los Angeles—See "Streets and Roads."

★Cal., San Diego—(Official)—City let contract for rein.-con. double compartment storm drain, 16th and Logan Sts., to Holland Constr. Co., Granger Bldg., $24,469. Noted Oct. 18.

BRIDGES

Proposed Work

Fla., Tampa—See "Streets and Roads."

Wis., Grand Rapids—Wood Co. plans to build steel bridge. About $60,000.

Kan., Topeka—City preparing plans for 100 ft. rein.-con. bridge over Shunganunga Creek, on 4th St. About $16,000. C. E. Baldry, city engr.

Que., Grand Mere—Laurentide Co., Ltd., plans to build steel bridge over St. Maurice River.

BIDS DESIRED

Pa., Nelson—(Official)—Until Dec. 11, by G. A. Shreiner, supt. pub. grounds and bldgs., Capitol, Harrisburg, building bridge at Nelson, Tioga Co.

W. Va., Fairmont—(Official)—Until Dec. 12, by Bd. Affairs, building rein.-con. bridge over Monongahela River. A. J. Kern, city clk.; advertised in this issue.

Ala., Livingston—Until Dec. 22, by Sumter Co. Comrs. building several rein.-con. slab bridges, culverts and piers, on State Trunk Rds. Nos. 3 and 5, between Livingston and Demopolis and Gainesville and Cuba; work involves 138 cu.yd. Class "A" concrete, 250 cu.yd. Class "B" concrete, 48 cu.yd. Class "C" concrete, and 12,000 lb. reinforcing steel.

Miss., Woodville—See "Streets and Roads."

Minn., Litchfield—See "Excavation and Dredging."

Neb., St. Paul—Until Dec. 10, by Howard Co., building one 40-, one 45- and one 28-ft. steel bridge and three 24-ft. wooden bridges. K. D. Bahensky, clk.

Mo., Jefferson City—See "Streets and Roads."

Mo., Kansas City—(Official)—Until Dec. 18, by Bd. Comrs., building Central Ave. viaduct. H. A. Mendenhall, mayor; advertised in this issue.

Mo., Kansas City—(Official)—Until Dec. 21, by W. C. Weaver, purch. agt., City Hall, building 23rd St. trafficway viaduct; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Phila.—Philadelphia & Reading Ry. let contract building 5 signal bridges and altering, moving and rebuilding 3 existing signal bridges, in connection with signaling between Delaware River and Skillman, to Belmont Iron Works, 22nd and Washington Ave.

★Ind., Logansport—Cass Co. let contract building bridge over Eel River on 3rd St. to Natl. Concrete Co., 804 Terminal Bldg., Indianapolis, $110,000. Noted June 21.

STRUCTURAL STEEL WORK

Proposed Work

Que., Grand Mere—See "Bridges."

BIDS DESIRED

Neb., St. Paul—See "Bridges."

REINFORCED CONCRETE

Proposed Work

N. Y., Olean—See "Water-Works."

N. Y., Syracuse—See "Industrial Works."

N. J., Ocean City—See "Miscellaneous."

Pa., Mt. Joy—See "Water-Works."

Wis., Eau Claire—See "Industrial Works."

Ia., Charter Oak—See "Industrial Works."

Kan., Topeka—See "Bridges."

Cal., Sacramento—See "Industrial Works."

BIDS DESIRED

Ala., Livingston—See "Bridges."

Mo., Jefferson City—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Middletown—See "Miscellaneous."

★N. Y., New York—See "Industrial Works."

★Pa., Chester—See "Buildings."

★O., Cleveland—See "Miscellaneous."

Cal., Long Beach—See "Sewers."

★Cal., Sacramento—See "Industrial Works."

★Cal., San Diego—See "Sewers."

Wash., Bremerton—See "Water-Works."

STREETS AND ROADS

Proposed Work

N. Y., White Plains—Comr. Pub. Wks. soon receives bids paving Hamilton and Martine Aves. and Stewart Pl. W. I. Collyer, city engr.

N. J., Atlantic City—City rejected bids building ornamental parkway from city limits to Virginia and Mediterranean Aves. as too far above estimates. Noted Nov. 22.

N. J., Elizabeth—Bd. Freeholders, Union Co., plan to appropriate $451,480 for road work during coming year. Work includes paving Faitoute and Michigan Aves. in Aldene Sect., $25,000; Springfield Rd., Summit, $10,000; also paving portions Hazelwood and Mountain Aves., and Chestnut St., Rahway, to cost $50,000 per mi. J. L. Bauer, co. engr.

N. J., Newark—Bd. Freeholders, Essex Co., plans to pave Rutgers St., Bloomfield, granite block.

N. J., New Brunswick—Middlesex Co. having plans prepared by A. Fox, engr., improving and rebuilding Sayerville-South Amboy Rd., 5 mi. long.

N. J., Newton—Bd. Freeholders, Sussex Co., plans paving Newton-Fredon Rd. W. Hardin, co engr.

Pa., Lansford—See "Sewers."

Pa., Philadelphia—City plans to open and continue 44th St. through property of Pennsylvania Hospital for Insane, from Market St. to Haverford Ave., West Phila. C. E. Albright, city engr.

Pa., Reading—Berks Co. Comrs. plan to build Old Turnpike to Harrisburg. About $100,000.

Pa., Sunbury—Boro. plans to pave Front St. from Bainbridge St. to intersection of Susquehanna Ave., 1⅛ mi., 16 ft. wide. Ab ut $54,000.

Del., Laurel—See "Sewers."

Md., Annapolis—Anne Arundel Co. soon lets contract concrete road from Annapolis Blvd. to St. Margarets. About $50,000. Federal Government to appropriate toward cost. H. R. Shirlet, c/o F. H. Zouck, chn. state highway rd. comrs., Garrett Bldg., Baltimore, engr.

Fla., Jasper—Hamilton Co. plans election Dec. 11 to vote on $400,000 bond issue to build roads.

Fla., Tampa — Palmetto-Ellenton Terra Ceia-Gillette Dist., Hillsborough Co., voted $200,000 bonds to build roads and bridges in district. Part of sum to be used in completing road to Hillsborough-Manatee line to connect with road which Hillsborough plans to build, giving complete hard surfaced road through Tampa.

Miss., Lexington—Holmes Co. sold $15,000 bonds for road work in Pickens-Richland Rd. Dist. and $25,000 in Special Rd. Dist. No. 2.

Ala., Anniston—Calhoun Co. voted to appropriate $68,000 to build road between here and Camp McClellan. War Dept. will furnish an equal amount. Noted Sept. 6.

O., Findlay—City passed resolution to issue $19,487 bonds to pave Lima Ave. to U. K. Stringfellow, city engr.

O., Newport—City plans to improve various streets. About $100,000. J. Herman, comr. pub. wks.

O., Rocky River—Village voted $100,000 bonds to pave streets. E. H. Arnold, village engr.

O., Stockport—Village having plans prepared by G. Dunn, engr., McConnellsville, for paving various streets. About $10,500.

O., Tiffin—Seneca Co., in conjunction with Seneca, Hopewell, Big Spring and Scipio Twps., plans to build 1½ mi. Tiffin-Upper Sandusky Rd., 2½ mi. Fostoria Rd. and 2 mi. Fostoria Carey Rd. About $150,000 will be expended.

O., Toledo—City having new plans prepared by H. McKechnie, city engr., for extending Summit St. to Bway. About $580,000. Cost to be borne equally by city and property owners. Noted July 26.

O., Urbana — Champaign Co. Comrs. passed resolution to improve Urbana-North Lewisburg Pike.

O., Youngstown — City Council passed resolution to pave portion South Ave. between Indianola Ave. and end of present pavement. F. M. Lillie, city engr.

Ind., Huntington — City had plans prepared resurfacing 3680 ft. Matilda St., wood block, brick, asphalt, asphaltic concrete or sheet asphalt. About $50,698. P. H. Latchen, city engr.

Mich., Mt. Clemens — Macomb Co. soon lets contract building 42.5 mi. road 9 to 16 ft. wide, slag or gravel top. About $90,000. W. J. Lehner, engr. Noted Apr. 12.

Ill., Marshall—Clark Co. voted $112,000 bonds to build roads. Z. Arbuckle, co. supt. highways.

Ill., Peoria—Peoria Co. appropriated $77,000 for construction of 5 mi. concrete roads. W. E. Emery, co. highway supt.

Wis., Black River—Jackson Co. having plans prepared building concrete pavement between Black River Falls and Melrose, about 3 mi. W. F. Baumgartner, La Crosse, state engr. Noted Apr. 5.

Wis., Manitowoc—City plans to surface and gravel 50 blocks; also to install sewers and water mains. About $65,000. F. V. Alter, city engr.

Wis., Merrill—Lincoln Co. plans to build roads through county. About $30,000. J. Brandt, aud.

Minn., Owatonna—Steele Co. Comrs. plan to spend $37,000 for road work next year.

Kan., Council Grove—Morris Co. plans to hard surface 33 mi. Old Trails Rd. across county. J. M. Lowe, pres. Natl. Old Trails Assn.

Kan., Fredonia — Wilson Co. preparing plans graveling 50 mi. roads. H. S. McFadden, co. engr.

Kan., Wichita—City passed resolution to pave Waco Ave. from 15th to 18th St., vertical fiber brick, and Buffum Ave. from Riverside Ave. to Riverside Dr., sheet asphalt. P. L. Brockway, city engr.

South Dakota—State Highway Comn., Pierre, plans to appropriate $25,000 for county highways. A. Peck, state road engr.

S. D., Sioux Falls—Minnehaha Co. plans to build 21 mi. macadam road from here to Dell Rapids. About $262,500.

Mont., Bozeman—City plans paving streets in Dist. No. 154, standard crushed rock bitulithic or some other hardsurface material. About $24,430. C. C. Widener, city engr.

Mont., Livingston—Park Co. plans to build highway from Gardiner to Meagher Co. line on Park-to-Park Highway. Federal Government to contribute $30,000 toward cost.

Mo., Clayton—St. Louis Co. plans road through Allenton, Eureka, Crescent, Valley Park, Kirkwood, Glendale, Webster Groves and Shrewsbury Twps., and along Watson Rd. into St. Louis. About $300,000.

Mo., Pleasant Hill—City plans improving portion 1st St., including grading, shouldering, surfacing and macadamizing with crushed rock.

Mo., St. Louis—City Plan Comn. plans to improve various streets, including opening of semicircular street as extension of Morgan St.; building twin cut-off on east side of Grand Ave. leading in opposite directions to Pine St. and Lawton Ave.; widening Lindell Ave. and other downtown streets. E. E. Kinsey, pres. bd. pub. serv.

Ark., Osceola—Mississippi Co. plans to build Osceola-Little River Rd.

Ark., Van Buren—Crawford Co. Comrs. soon lets contract building 35 mi. of Van Buren-Winslow Pike to connect Van Buren with modern highway extending down to North Arkansas from Kansas City and St. Louis. Cost to be borne be county, state, federal government and Frisco Lines. Noted Oct. 18.

Streets and Roads (Continued)

Tex., Baird—Callahan Co. plans election Dec. 21 to vote on $100,000 bond issue constructing highway through Baird, Clyde and Putnam. Noted Apr. 5.

Tex., Bryan—Brazos Co. plans election to vote on $70,000 bond issue to build roads in Millican Dist.

Tex., Decatur—Wise Co. voted $80,000 bonds to build Meridian Highway through county. Noted Oct. 25.

Tex., Dickens—Comrs. Court of Dickens Co. voted $400,000 bond issue to build roads. Noted Nov. 15.

Tex., Fairfield—Freestone Co. Rd. Dist. No. 2, voted $20,000 bond issue for road work.

Tex., Roby—Fisher Co. Comrs. plan election Dec. 17 to vote on $250,000 bond issue for road work.

Tex., Sweetwater—Nolan Co. voted $100,000 bonds to build roads. Noted Oct. 18.

Tex., Vernon — Wilbarger Co. voted $115,000 bonds to build roads in Dist. No. 1. Noted Nov. 8.

Okla., Bartlesville—City soon lets contract repaving 2nd and 3rd Sts. from Dewey Ave. to railroad tracks, vertical fibre brick. About $14,000. E. D. Kirkpatrick, city engr. Noted Aug. 16.

Okla., Waurika — Jefferson Co. Comrs. plan to appropriate $10,700 for highway improvements, including grading and bridge building on Chisholm trail from Stephens Co. line to Red River.

Okla., Woodward—(Official)—Woodward Co. defeated $675,000 bond issue to build roads and bridges. Noted Nov. 8.

Colo., Conejus—Conejus Co. plans to build road over Cumbres Pass from Antonito to Elk Creek. About $30,000.

Wash., Goldendale—Klickitat Co. rejected bids grading and macadamizing about 16 mi. Permanent Highway No. 6, known as White Salmon-Snowden Rd. Noted Oct. 25.

Wash., North Yakima — Yakima Co. Comrs. plan to build 11.95 mi. McClellan Pass Highway; about $80,587. County to pay $17,625, state, $22,669, and Federal Government, $40,293. Noted Aug. 16.

Wash., Waterville—Dougals Co. rejected bids building Permanent Highway No. 4A, 1½ mi., involving grading, draining and surfacing with crushed rock. About $10,194. Noted Oct. 25.

Oregon—State Highway Comn., Salem, having plans prepared building Pacific Highway between Albany and Jefferson, 9 mi.

Ore., North Bend—City plans about 1 mi. concrete paving, 16 ft. wide. R. L. Cavanaugh, city engr.

California—State Highway Comn., Sacramento, soon lets contract paving highway in Eldorado Co. A. B. Fletcher, Sacramento, state highway engr.

Cal., Alturas—Modoc Co. plans to build road from Alturas to Nevada line, 32 mi., to open up lateral from main valley trunk line to State Highway into Nevada. Federal Government will contribute towards cost.

Cal., Bakersfield — Kern Co., (Bakersfield), and San Luis Obispo Co., (San Luis Obispo), and State Highway Comn., Sacramento, plan to build 91.22 mi. highway from Wasco to Paso Robles through both counties. About $982,893. State will appropriate $460,865 toward cost.

Cal., Hamilton City—Glenn Co. plans to form boulevard district to build 14 mi. concrete highway from Monroeville north to county line and from Gianella Bridge to western boundary of district.

Cal., Los Angeles—Los Angeles Co. plans to organize road improvement district to build 74 mi. road in Antelope Valley. F. H. Joyner, co. road comr., preparing plans.

Cal., Newport Beach—City plans to pave Central Ave., 4-in. concrete, with 2-in. Topeka surface; Bay Ave., 4-in. concrete with 1-in. Topeka surface; also cement sidewalks on various other streets.

Cal., San Francisco—State Bd. Harbor Comrs., Sacramento, soon lets contract paving east side of Embarcadero between piers 7 and 17, including 60,000 sq.ft. bituminous, concrete pavement, and relaying 30,000 sq.ft. base-block pavement.

Cal., Santa Ana—City plans improving North Parton St., including curbing, grading and macadamized pavement; 4th St. between Bristol and Artesia St., 4 in. concrete base and 1½ in. asphaltic oil wearing surface. C. Bonebrake, city engr.

Cal., Santa Cruz—City soon receives bids paving various streets. G. Cromwell, city engr.

BIDS DESIRED

Mass., Fitchburg—(Official)—Until Dec. 15 by Dept. Streets & Engr., furnishing paving material. W. J. Gannon, acting comr.; advertised in this issue.

N. J., Elizabeth—Until Dec. 4 by Bd. Freeholders, Union Co., improving Washington and South Aves., and Edgar Rd., stone and tarvia, about 6600 lin.ft. J. L. Bauer, 120 Broad St., co. engr.

N. J., Elizabeth—Until Dec. 27, by city, paving portion Valley St., Vaux Hall Dist., macadam on macadam base. T. E. Collins, city engr.

Pennsylvania—(Official)—Until Dec. 11, by State Highway Comn., Harrisburg, for road work in Erie and Clearfield Cos.; advertised in this issue.

Va., Eastville—Until Dec. 3, by Northampton Co., building road between Persimon Tree and Salt Works in Franktown Dist., 1½ mi.

Ala., Geneva—Until Dec. 11, by Geneva Co., building portion Samson & Opp Rd., part of State Trunk No. 12. W. S. Keller, Montgomery, state highway engr.

Ala., Jasper—Until Dec. 15, by Walker Co., building portion Jasper & Birmingham Highway, being part of State Trunk Rd. No. 9, between Jasper and Birmingham, 4.5 mi. long, including 10,071 cu.yd. earth excav., 5 acres clearing and grubbing, 415 ft. culvert pipe, 3590 cu.yd. crushed sandstone. W. S. Keller, Montgomery, state highway engr.

Miss., Woodville—Until Dec. 4, by Wilkinson Co., improving several roads, including grading and building small bridges, culverts and abutments and vitr. iron pipe for drains. L. Lewis, clk.

Ind., Anderson—Until Dec. 12, by Madison Co. Comrs. paving Meridian Ave. Former contract rescinded. Noted Nov. 22.

Ia., Jefferson — Until Dec. 4, by Bd. Supervs. Green Co., furnishing, delivering and spreading gravel on Junction-Dana Rd., Panora Rd., Rippley-Dawson Rd., Jefferson-Bagley and Farlin-Churdan Rds.

Neb., Kearney—Until Dec. 3, by C. D. Swan, city clk., for paving Dist. No. 29, about 10,112 sq.yd.; alternate bids on sheet asphalt, vertical vibre brick, asphaltic concrete and concrete pavement. H. W. Kibbey, city engr.

Mo., Jefferson City—Until Dec. 6 by Cole Co., for improving, grading, graveling and building rein.-con. culverts, etc., portions of Henley and Marys Home Rd., Hough Park Dr., Osage Bend and Williams Ferry Rds., and Russelville-Centertown Rds., Boonville and Decatur Rds., roads in Dist. No. 9. F. C. Harding, co. highway engr.

Tex., Gilmer—(Official)—Until Dec. 10, by Upshur Co. court, grading and surfacing roads. W. H. McClelland, co. judge. Noted Oct. 25.

Washington—Until Dec. 10, by State Highway Comn., Olympia, clearing, grading and draining, 5.21 mi. Pacific Highway between Woodland and Martins Bluff, in Cowling Co.; widening embankment and changing tracks of Southern Pacific Ry. System west of Cooks in Skamanie Co., involving 30,000 cu.yd. embankment.

Cal., San Diego—Until Dec. 3, by A. H. Wright, city clk., grading Upas St. between Granada Ave. and line 120 ft. west, and Abbott St. from Long Beach Ave. to Brighton Ave. G. Cromwell, city engr.

Cal., Yreka—Until Dec. 4, by W. J. Neilon, clk., Siskiyou Co., building Sanborn Hill Rd.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Mass. Boston—City received low bids paving Fens Pkway., from Warren Bros., 142 Berkeley St., bitulithic, $17,207; Rowe Constr. Co., 1607 Commonwealth Ave., Brighton, sheet asphalt, $16,712; asphaltic concrete, $17,762.

★**N. Y., Lawrence** — Village let contract building 6 in. concrete pavement, 18 ft. wide, to Ganford Co., 581 Jackson Ave., Long Island City, $13,245. Noted Oct. 25.

N. Y., New York—M. Marks, boro. pres., received low bids Nov. 13, regulating and repaving roadway of 52nd St., from point 68 ft. west of Park Ave. to 5th Ave., sheet asphalt on concrete foundation, from Cleveland Trinidad Pav. Co., Flushing, $13,101; Asphalt Constr. Co., 2197 Madison Ave., $13,447; Uvalde Asphalt Paving Co., 1 Bway., $14,060; grading and regulating Laurel Hill Terrace from West 181st to West 184th St., and flagging West 184th St., Laurel Hill Terrace, to Amsterdam Ave., from Burnside Contg. Co., 270 Burnside Ave., $17,457; N. Di Menna, 2336 Cambrelling Ave., $18,363; Angelo Contg. Co., $19,059.

★**N. Y., New York**—M. M. Marks, boro. pres., let contract regulating and paving Riverside Dr. Service St. from 162nd to 165th St., sheet asphalt, to Asphalt Constr. Co., 2197 Madison Ave. About $12,563.

★**N. J., Freehold**—Bd. Freeholders Monmouth Co. let contract building Freehold-West Freehold Rd., to R. Hafeman Co. About $36,024.

★**N. J., Mount Holly** — (Official) — Bd. Freeholders Burlington Co. received no bids paving 4-mi. highway between Wrightstown and Georgetown. Work will be done by convict labor. Noted Nov. 15.

N. J., New Brunswick—Middlesex Co. received low bids paving and improving (a) Sect. 1 of River Rd., in Piscataway and Highland Park, warrenite on macadam foundation, (b) Sect. 2, same road, from T. H. Riddle, 102 Church St., (a) $163,490; Meagher & Smith, 211 Market St., Perth Amboy, (a) $164,426; (b) $150,196; Utility Constr. Co., 46 Paterson St., (a) $166,859, (b) $149,922; Liddle & Pfeiffer, 137 New Brunswick Ave., Perth Amboy, (a) $168,360, (b) $149,203. Noted Nov. 8.

Pa., Norristown — Montgomery Co. received only bid building 7 mi. Germantown Rd. from DeKalb St. Rd. to Collegeville, from Union Paving Co., 30th and Locust Sts., Phila. About $177,469. Noted Oct. 25.

Pa., Phila.—(Official)—G. E. Datesman, dir. pub. serv., received low bids for 32,121 cu.yd. grading from J. McMenany & Co., 512 Walnut St.; D. Duffing, 2501 East Lehigh Ave., average price $.92 per cu.yd.; constructing portion of Pkway., east of 17th St. to Race St., from J. J. McHugh, 1430 South Penn Sq., $44,437. Noted Nov. 8.

★**N. C., New Bern**—City let contract building about 1 mi. of brick streets, connecting Neuse River Co. bridge with improved county highway leading through Vanceboro, to Georgia Eng. Co. About $12,000.

★**Ala., Brewton**—Escanaba Co. let contract building 9 mi. sand clay road between Andalusia and Brewton (portion of state highway through southern Alabama), to J. N. Gillis & Sons, Brewton. About $21,276. Noted Nov. 1.

★**Ala., Troy**—City let contract for 12,000 sq.yd. paving and several thousand sq.yd. sidewalks to Southern Clay Mfg. Co., Jones Bldg., Chattanooga, Tenn. About $45,000.

★**La., Baton Rouge**—East Baton Rouge Co. let contract building road, to S. A. Gano, Jackson, Miss. About $50,000. Noted Nov. 1.

★**Tenn., Clarksville**—(Official)—City let contract paving portions 3 streets, involving 15,000 sq.yd. asphaltic concrete on concrete base, to West Constr. Co., 10th and Market Sts., $33,353. Noted Nov. 1.

★**O., Bryan**—(Official)—City let contract improving and paving 2 sections of Union St., to Brooke Constr. Co., 2104 Miner St., Ft. Wayne, Ind., $22,000. Noted Oct. 25.

★**O., Canton**—Stark Co. let contract grading, paving and curbing Georgetown Rd., to F. A. Downs, 609 2nd St., N.E., $34,000; building Justus Beach City Rd., to Seipel & Wolf Constr. Co., Wick Bldg., Youngstown, $53,000.

★**O., Cleveland**—City let contract paving portion Archwood Ave., to Roehl Bros., West 25th St. and Clark Ave., $39,887. Noted June 14.

★**Michigan**—(Official)—State Bd. Lansing, appropriated $35,000 and Monroe Co. $15,000 to build military road between Detroit, Mich. and Toledo, O. Work will be done by day labor under direction of Monroe Co. Noted Nov. 15.

Streets and Roads (Continued)

★Ill., Joliet—City let contract paving Jackson St. from Chicago to Collins St., to R. F. Conway Co., Chamber of Commerce Bldg., Chicago, $29,770.

★Minn., Duluth—St. Louis Co. let contract paving 4 mi. road in Stuntz Twp., to E. W. Coons Co., 230 Center St. About $0.74 per sq.yd.

Neb., Holdredge—(Official)—City received low bids improving streets in Dist. No. 1, involving 39,100 sq.yd. pavement, 4442 ft. curb, 10,053 lin.ft. curb and gutter, from E. D. Tyner Constr. Co., Kansas City, Mo., Class A brick, $2.54; Class B, $2.39; Roberts Constr. Co., 510 1st Natl. Bank Bldg., Lincoln, Class A, brick, $2.53; Class B, $2.39. Noted Nov. 1.

★Tex., Houston—Harris Co. let contract improving Telephone Rd., to Haden & Austin, $29,970.

★Colorado—(Official)—State Highway Comn., Denver, let contract building Sect. 1, Fall River Rd., between Fall River and Milner Pass, Larimer Co., to Jacobson & Severson, Boulder, $20,303. Noted Nov. 8.

★Ore., Portland—City plans to repave Terwilliger Blvd. by day labor. About $23,390.

★California—(Official)—State Highway Comn., Sacramento, let contracts paving in various counties as follows:

Los Angeles Co., between San Fernando and Rancho Tujunga, Div. 7, Route 9, Sect. A, to A. L. McCrary, 422 Amer. Bank Bldg., Los Angeles.

Humboldt Co., between Garberville and Miranda, Div. 1, Route 1, Sect. B, to Palmer & McBryde, Hooker and Lent Bldg., San Francisco.

Fresno Co., between Malaga and Fresno, Div. 6, Route 4, Sect. B, to Blanchard-Brown Co., New Call Bldg., 74 Montgomery St., San Francisco.

San Luis Obispo Co., between Santa Maria River and Arroyo Grand, Div. 5, Route 2, Sect. F, to W. A. Dontanville, Los Angeles.

Nevada Co., grading 9 mi. between southerly boundary and Rattlesnake Creek, Div. 3, Route 17, Sect. A, to A. J. Fairbanks, Willits, $83,221. Noted Nov. 1.

★Cal., Los Angeles—City let contract grading, paving, and building storm drain in 10th St. between Vermont Ave. and line 92 ft. west of Gramercy Pl., warrenite on 5 in. concrete base, to Fairchild-Gilmore Wilton Co., Pacific Electric Bldg., $33,800. Noted Oct. 18.

★Cal., Los Angeles—Los Angeles Co. let contract improving Lexington and Gallatin Highway, to Redondo Constr. Co., 218 South Redondo Ave., Redondo Beach, $18,500.

Cal., San Diego—City received lowest bid improving Utah St. from Upas St. to University Ave., including 142,630 sq.ft. 4 in. concrete paving, 2896 sq.ft. cement walk, 575 lin.ft. cement curb, ten 4-in. and thirteen 6-in. sewer laterals, 2676 ft. 6 in. Class A water pipe, etc., from G. R. Daley, 440 McNeece Bldg. About $24,707. Noted Sept. 27.

★Cal., Ukiah—Mendocino Co. rejected only bid building Elk Creek-Greenwood Rd. About $15,000. Work will be done by day labor.

★Que., Contrecoeur—Town Council let contract building macadam road, to Gaudette & Lachapelle, St. Ours. About $10,531.

★Que., Grand Mere—City let contract building concrete highway to A. Carrier, Ste. Tite de Champlain. About $300,000.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

New Jersey—Bd. Pub. Utility Comrs. granted permission to Erie R.R. to issue $15,000,000 bonds to improve its lines and system. R. S. Parsons, 50 Church St., New York City, ch. engr.

Tennessee—Yazoo & Mississippi Valley R.R. increased its capital stock from $15,000,000 to $21,553,300, and plans to double-track line from Memphis to Vicksburg, Miss., about 190 mi. Work to be done at rate of 20 mi. a year. A. H. Egan, Memphis, supt.

Kansas—Dodge City & Cimarron Valley Ry., subsidiary Atchison, Topeka & Santa Fe Ry., plans to build line from Satanta, west to Colorado line, about 62 mi. Work involves moderately heavy grading. C. F. W. Felt, Ry. Ex. Bldg., Chicago, ch. engr.

Idaho—American Smelting & Refining Co., 120 Bway., New York City, plans to build 14-mi. railroad from Lewiston up South Fork of Clearwater River to Northern Pacific R.R. at Stites.

California—Clear Lake R.R. granted permission by State R.R. Comn. to issue $1,152,900 bonds to build line from Hopland, Mendocino Co., to Lakeport, Lake Co., about 23 mi. M. S. Sayre, Lakeport, vice-pres.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Wyoming—Union Pacific R.R. let contract double tracking and grading line between Le Roy and Aspen and Atlamont and Evanston, about 16 mi., to Utah Constr. Co., McIntyre Bldg., Salt Lake City, Utah.

EXCAVATION AND DREDGING

Proposed Work

Ia., Mason City—Drainage—Cerro Gordo Co. rejected bids opened Nov. 7, building D. D. No. 49, Sect. 1, involving 3200 ft. 9-28-in. tile, Sect. 2, 17,850 ft. 8-18-in. tile. G. E. Frost, aud. Noted Nov. 1.

Minn., Bagley—Ditch—Clearwater Co. sold $65,500 bonds to build Judicial Ditch No. 3. H. K. Rude, co. aud.

Utah, Fillmore—Drainage—Millard Co. plans to sell $54,000 bonds, Dec. 8, for drainage improvements. G. W. Cropper, Deseret, pres. of project.

Utah, Kanab—Irrigation—H. A. Parkyn, 1511 Marquette Bldg., Chicago, applied to G. F. McGonagle, state engr., for permission to use 100,000 acre-feet water from Paria River to irrigate land in Kane Co.

Ore., Bend—Irrigation—North Unit Irrigation Dist., Deschutes Co., voted $5,000,000 bonds to build irrigation system to cover 100,000 acres.

Ore., Grants Pass—(Official)—Irrigation—Grant Pass Irrigation Dist. receiving bids about Dec. 1 for district covering 5250 acres, involving 35 mi. main canal, laterals, flumes, tunnels, etc. About $250,000. G. A. Hamilton, Secy. Noted Sept. 20.

Cal., Hanford—Irrigation—Lakeland Canal Co. plans to repair canal, 35 mi. long, to irrigate 30,000 acres. About $25,000. Address E. E. Bush.

BIDS DESIRED

N. Y., Albany—(Official)—Canal—Until Dec. 20, by W. W. Wotherspoon, supt. Pub. Wks., Capitol, repairing and waterproofing existing concrete lining and placing new concrete lining in Canal, Little Falls, Cont. No. 181; advertised in this issue.

N. Y., New York—Excavation—Until Dec. 6, by F. J. H. Kracke, comr. plant and structures, Municipal Bldg., excavating and dredging at site of Eastchester Bridge.

Ind., Anderson—(Official)—Drain—Until Dec. 5, at office of A. C. Call, atty., Phoenix Bldg., Anderson, building Sarah E. and William O. Canady Drain No. 2192, involving 16,776 ft. 6-24-in. tile, 10,979 cu.yd. excav. About $11,738. H. L. Jones, supt. of constr.

Ia., Clarion—Drainage—Until Dec. 10, by F. E. Osier, aud., Wright Co., building Franklin-Wright Joint Drain Nos. 8-159, involving 46,756 ft. 6-28-in. tile; Franklin-Wright Joint Drain Nos. 6-141, involving 53,958 ft. 6-30-in. tile, etc.

Minn., Litchfield—Ditch—Until Dec. 4, by A. O. Palmquist, aud., Meeker Co., building Co. Ditch No. 47, involving 165,451 cu.yd. excav., four 28-ft. I-beam bridges, etc. About $17,345.

Cal., El Centro—Irrigation—Until Dec. 14, by Imperial Irrigation Dist., for raising volcano and Saiz levees. Former job will involve 555,000 cu.yd. excav., by train and steam shovel, and must be completed by Apr. 15; latter job about 240,000 cu.yd. excav., mostly by teams and scrapers and must be completed by Apr. 1. Rock riprap will be constructed later. Cost about $500,000. C. K. Clarke, ch. engr. F. H. McIver, clk. Noted June 7.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Pa., Phila.—(Official)—Dredging—G. E. Datesman, dir. pub. serv., received only bid dredging creeks in 40th Ward, from Chew Bros., Mantus, N. J., $10,380. Noted Nov. 8.

★Ia., Algona—Drainage—Bd. Superv. Kossuth Co. let contract building D. D. No. 152, to Berkland & Littell, Eagle Grove, Ia., $26,594; D. D. No. 153 and Sub. D. D. No. 6, to Welp Cement Products Co., Bancroft, Ia., $20,373 and $19,483 respectively. Noted Oct. 25.

★Ia., Clarion—Drainage—Wright Co. let contract labor for building Franklin-Wright Joint Nos. 8-159 to M. Jensen, Clear Lake, Ia., for Franklin-Wright Joint Drain Nos. 6-141 to J. S. Jensen, Rutland, Ia. Bids for material will be readvertised. Noted Nov. 8.

★Minn., Anoka—(Official)—Anoka Co. let contract building Co. Ditch No. 59, as follows: W. R. Ewing, Inc., 112 West Adams St., Chicago, floating dredge work, $16,707; S. H. Adams, Long Prairie, Minn., dry works, $17,416. Noted Nov. 15.

INDUSTRIAL WORKS

Proposed Work

Mass., New Bedford—Manomet Mills, Riverside Ave., plans 2-story, 80 x 189-ft. addition to its plant. About $200,000.

Mass., West Springfield—Boston & Albany R.R. plans to build transformer station here. About $35,000. F. B. Freeman, Boston, ch. engr.

N. Y., Brooklyn—Roberts Numbering Machine Co., 706 Jamaica Ave., having plans prepared by W. C. Winters, archt., 106 Van Siclen Ave., for 2½ story addition to its factory, Jamaica Ave. About $30,000.

N. Y., New York—S. Ransom, 401 West St., plans 4-story, 64 x 81-ft. addition to its boiler factory. About $60,000.

N. Y., New York—J. L. Schnurmacher, 402 East 108th St., had plans prepared by O. L. Spannhake, archt., 13 Park Row, 2-story, 100 x 150-ft. public garage, 1190 62nd Ave. About $50,000.

N. Y., Rochester—C. D. Brown Co., 6 Redfield St., rejected bids building 3-story, 48 x 75-ft. tannery. About $25,000. Foote, Headley & Carpenter, 401 Carter Bldg., archts.

N. Y., Syracuse—Church & Dwight Co., 27 Cedar St., New York City, having plans prepared by Starrett & Van Vleck, archts., 8 West 40th St., New York City, 3-story, 93 x 240-ft., rein.-con. warehouse, Willis Ave. About $100,000. E. A. Schroeder, 1416 Willis Ave., local mgr.

N. Y., Watertown—City having plans prepared by S. M. Greene & Co., engrs. and archts., 293 Bridge St., Springfield, Mass., building power plant and fireproof power house about 1½ mi. from city. Cost, $300,000.

N. J., Cartaret—United States Metal Refining Co., Chrome, N. J., secured 120 acres land here and plans to build plant.

N. J., Jersey City—Brandis & Co., Inc., 15 Exchange Pl., recently organized with $100,000 capital stock, plans to build factory here.

N. J., Jersey City—Pennsylvania R.R. had plans prepared by Maintenance of Way Dept., Phila., for addition of 19 stalls at engine terminal here. A. C. Shand, Broad St. Sta., Phila., ch. engr.

N. J., Newark—Bonnell Motor Car Co., 520 Broad St., having plans prepared for 1-story, 110 x 180-ft. machine shop and service station, 39 Sussex Ave. About $35,000.

N. J., Newark—Heller & Merz, Hamburg Pl. Rd., plan to build two 1-story, 70 x 200-ft. factories. About $56,000.

N. J., Newark—E. & H. Levy, 35 Maiden Lane, New York City, had plans prepared by F. A. Phelps, archt., Union Bldg., for factory on Purdy St. About $75,000.

Pa., Erie—Bay City Forge Co. plans 1-story, 67 x 176-ft. brick and steel machine shop. E. C. Parshall, Cranberry and West 18th Sts., genl. mgr. A. F. Schotte, engr., 405 Palace Hardware Bldg., soon receives bids.

Pa., Lancaster—Rowe Motor Mfg. Co., Downington, purchased 5-acre tract and plans to build factory here. S. J. Rowe, pres.

Pa., Pittsburgh—Electric Co., Lexington Ave., having plans prepared by C. D. Cooley & Co., archt., Century Bldg., Pittsburgh, Pa., for 50 x 200-ft. brick factory. About $40,000.

Industrial Works (Continued)

Pa., Pittsburgh — Miller-Owen Electric Co., had plans prepared by C. D. Cooley Co., archts., Century Bldg., for 50 x 200-ft. plant near switch of Penn. R.R. About $40,000.

Pa., Pittsburgh—Ward Mackey Biscuit Co. having plans prepared for factory on North Lexington Ave. About $350,000.

Del., Wilmington—Cahill Bros., 2nd and French St., had plans prepared for automobile repair shop and show room. About $30,000. J. P. Cahill, mgr. J. J. Kennedy, 925 Market St., archt., soon lets contract.

Md., Baltimore—Corkan & Hill Co., Union Stockyards, soon receives bids building 3-story, brick and rein.-con. plant. Noted Nov. 8.

Va., Norfolk—Natl. Concrete Boat Co., recently organized with $1,000,000 capital stock, had plans prepared for shipbuilding plant here.

Va., Pulasky—Natl. Carbide Co. recently increased capital stock from $350,000 to $600,000 and plans additions to its plant here. S. M. Buck, pres.

W. Va., Morgantown — American Sheet Tin Plate Co., plans large factory at Barbarton, suburb of Morgantown.

S. C., Charleston—Southern Shipbuilding Corp., recently organized by Whittelsey & Whittelsey, naval archts., 17 Battery Pl., New York City, will build shipyard here to construct fabricated steel ships for U. S. Government, having obtained large contract from Emergency Fleet Corp. H. Newton Whittelsey, pres.

La., New Orleans—Morris & Co., Union Stock Yards, Chicago, plans 3-story brick addition to packing plant here. About $100,000.

O., Bedford—Owen Tire & Rubber Co., 1900 Euclid Bldg., Cleveland, receives bids about Dec. 10 for 1- and 2-story, 20 x 40-ft. and 60 x 340-ft. factory and power house. About $125,000. W. C. Owen & Co., 1900 Euclid Ave., Cleveland, archts. Noted Nov. 15.

O., Cleveland—G. Malham, 689 East 99th St., had plans prepared for 1-story, 40 x 150-ft. garage. About $25,000. J. Collins, 1025 Illuminating Bldg., archt., soon lets contract.

O., Cleveland—Westinghouse Electric & Mfg. Co., 413 Huron Rd., plans 1- and 2-story, 150 x 150-ft. addition to its foundry, 1228 West 58th St.

O. Toledo—Long Dressed Beef Co., 2351 East 4th St., soon lets contract, 2-story, 57 x 83-ft. packing plant, West 68th St. and Cleveland, Cincinnati, Chicago & St. Louis R.R. About $30,000. E. G. Long, mgr. J. Kalsch, 4500 Euclid Bldg., archt.

O., Toledo—Swiss Magneto Co., Monroe, O., recently organized with $400,000 capital stock, plans factory here between Pinewood and Norwood Aves. A. A. Megget, pres.

O., Youngstown—Amer. Sintering Co., 10 Poland Ave., plans to rebuild its plant recently destroyed by fire. About $75,000.

Mich., Detroit—Chevrolet Motor Co., 1244 Woodward Ave., plans new factory, also addition to its present plant here. About $100,000 and $300,000 respectively.

Mich., Detroit—Detroit Steel Products Co., East Grand Blvd. and Griffin St., had plans prepared by Smith, Hinchman & Grylls, archts., 710 Washington Arcade, for 1-story, 79 x 270-ft. and 90 x 168-ft. sash shop. About $100,000.

Mich., Detroit—Schoen Bros., 322 Decatur St., Atlanta, Ga., plan to build abattoir opposite Detroit stock yards here. About $125,000.

Mich., Detroit—Wayne Co. having plans prepared by F. F. Van Tuyl, engr., 1112 Union Trust Bldg., for light and power plant on Randolph St. About $100,000.

Ill., Chicago—J. Davis, 1400 Milwaukee Ave., plans 4-story, 73 x 125-ft. factory, at Milwaukee Ave. and Lincoln St. About $125,000.

Ill., Chicago — E. S. Gamble, Gladstone Hotel, plans to build garage on 138th St. About $42,500.

Ill., Chicago—Hotpoint Electric Heating Co., Ogden Ave. and 22nd St., plans to build factory here. About $250,000.

Ill., Chicago—Marshall Field & Co., State and Washington Sts., had plans prepared for 2-story garage. About $60,000. Graham, Anderson, Probst & White, 80 East Jackson Blvd., archts., soon let contract.

Ill., Chicago — C. Quinlan, 124 South Green St., plans 4-story factory. About $30,000. A. F. Pashley, 431 South Dearborn St., archt.

Ill., East St. Louis—B. Gratz, c/o Amer. Mfg. Co., 1026 South 11th St., St. Louis, Mo., having plans prepared by Klipstein & Rathman, archts., Chemical Bldg., St. Louis, Mo., for 1-story, 60 x 80-ft. power plant and 1-story, 60 x 70-ft. machine shop. About $40,000 and $30,000 respectively.

Wis., Eau Claire — United States Auto Gear Shift Co., Eau Claire, plans 2-story, 100 x 165-ft. brick, steel and concrete plant. About $90,000. N. J. Whelan, pres.

Wis., Eau Claire—United States Switch Co. receives bids about Dec. 1 for 60 x 130-ft. rein.-con. forge shop. T. C. Hadley, genl. mgr. Noted Nov. 15.

Wis., Kenosha—White, White & White, archts., soon let contract for 1-story, 70 x 125-ft. brick, steel and concrete addition to Arneson Foundry Co., 319 Exchange St. About $50,000.

Wis., Milwaukee—See "Buildings."

Wis., Oshkosh — Oshkosh Storage Co., Oshkosh, plans 5-story, 60 x 90-ft. rein.-con. and steel cold-storage plant. About $75,000.

Wis., Port Washington—Turner Mfg. Co. has increased its capital stock from $150,000 to $250,000, and plans to build addition to its factory here. M. Turner, vice pres.

Wis., Racine—J. I. Case Plow Co., Mead St., plans 4-story, 105 x 123-ft. brick warehouse. About $50,000. A. A. Guilbert, Robinson Bldg., archt.

Ia., Charter Oak—Godbersen Co., Dennison, plans to build 2-story, 100 x 150-ft. factory, concrete. About $50,000.

Minn., Stillwater—Twin City Forge & Fdry. Co., subsidiary of Minneapolis Steel & Machinery Co., 29th St. and Minnehaha Pkway, Minneapolis, plans to build large munitions factory here. G. A. Atwood, Stillwater, pres.

Tex., San Antonio—Missouri, Kansas & Texas R.R. plans to build ice and cold storage plant here. About $100,000. F. Ringler, Dallas, ch. engr.

Tex., Victoria—City had plans prepared for electric-light plant. About $40,000.

Wash., Seattle—Barton & Co., Spokane Ave. and Wyoming St., plans to build packing plant in Duwamish Valley. About $250,000.

Cal., Sacramento—J. H. Herspring & Co., Superior California representatives of State Prune & Apricot Growers' Assn., plans to build 4-story, 30 x 160-ft. rein.-con. packing plant, 12th and B Sts. About $200,000.

Que., Montreal — Canadian Steel Foundries Co., Inc., 120 St. James St., plans to build addition to its plant. About $60,000.

Ont., Essex—Essex Tractor Co., Essex, having plans prepared for factory and foundry. About $50,000.

Ont., Eugenit — Hydroelectric Power Comn. having plans prepared for addition to its power plant. About $75,000.

Ont., Lindsay—Grand Trunk Ry. had plans prepared for roundhouse, machine shops and coal hoist. About $100,000. J. D. McMillan, Belleville, supt. of div. H. R. Safford, Montreal, Que., ch. engr.

Ont., Toronto—Dominion Shipbuilding Co., Ltd., purchased 15-acre site on water front, and plans shipbuilding plant between Spadina Ave. and Queen's Wharf.

Ont., Toronto — W. Williamson plans to build addition to planing mill on Woodbine Ave. About $35,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Me., Oakland—Amer. Woolen Co., Shawmut Natl. Bank Bldg., Boston, let contract power house, to E. W. Pitman Co., Bay State Bldg., Lawrence, Mass., $75,000.

★Mass., Cambridge—Worthington Pump & Machinery Co. 265 3rd St., let contract 1-story, 81 x 121-ft. foundry, to Aberthaw Constr. Co., 27 School St., Boston. About $48,000.

★N. Y., New York—Baker & Williams, 519 West 29th St., let contract 9-story, 100 x 100-ft., fireproof warehouse at Greenwich and Leroy Sts. to Cauldwell-Wingate Co., 381 4th Ave. About $300,000.

★N. Y., New York—Willoughby Garage Corp., 25 Court St., let contract 2-story, 92 x 154-ft. rein.-con. garage, 238-66 West 19th St., to G. & M. Impvt. Co., 26 Court St., $100,000. Noted Oct. 25.

★N. Y., Rochester—Rochester Light & Power Co. let contract 4-story, 35 x 50-ft. addition to power plant, to Turner Constr. Co., 244 Madison Ave., New York City.

★N. Y., Utica—West End Brewing Co., 811 Edward St., let contract 3-story, 72 x 150-ft. bottling plant, to P. Kerner & Son, 538 Canal St.

★N. J., Elizabeth—Waclark Wire Co. let contract 2-story, 105 x 177-ft. factory addition to Almion Eng. & Contg Co., 25 Church St., New York City. About $100,000.

★N. J., Jersey City—Amer Can Co., 120 Bway., New York City let contract 4-story, 172 x 200-ft. addition to storage building, Communipaw Ave., near Woodward St., to W. L. Goeltz, Inc., 50 Broad St., New York City. About $500,000. Noted July 26.

★N. J., Jersey City—Central R.R. of New Jersey let contract 1-story power plant to Westinghouse, Church, Kerr & Co., 37 Wall St., New York City. About $150,000.

★Pa., Phila.—City let contract building power house at Vintage and University Aves., to Standard Constr. Co., 1713 Sansom St., $238,000.

★Pa., Phila.—W. Cramp & Sons, Richmond and South Morris Sts., let contract 1-story, 58 x 100-ft. and 120 x 120-ft. shops, to Joffman Eng. & Constr. Co., Pennsylvania Bldg. About $35,000.

★Pa., Phila.—M. Lloyd & Co., 20th and Ridge Ave., let contract building 1-story, 25 x 70-ft. garage to E. E. Hillonback, 1809 Brandywine St., $25,000.

★Pa., Phila.—W. T. White let contract 1-story, 215 x 353-ft. brick machine shop, 20th St. and Erie Ave., to Watson Eng. Co., 216 North Broad St. About $130,000.

★Tenn., Paris—(Official)—Louisville & Nashville R.R. let contract building addition to roundhouse, to G. H. Rommel Co., 639 South Campbell St., Louisville, Ky. About $60,000. Noted Nov. 8.

★O., Akron—Northern Ohio Traction & Light Co., Hamilton Bldg., let contract 1-story, 44 x 175-ft. garage to H. P. Moran Co., 425 2nd Natl. Bank Bldg., $30,000.

★O., Cincinnati—Seton Realty Co., 136 East 4th St., let contract 3-story, 40 x 65-ft. sales and service station, to Leibold, Gott Bldg. Co., 134 East 4th St., $28,000.

★O., Cleveland—Hydraulic Pressed Steel Co., 3152 East 61st St., let contract brick and steel plant to Westinghouse, Church, Kerr & Co., 37 Wall St., New York City. About $1,500,000.

★O., Columbus—Pennsylvania Lines West of Pittsburgh (Southwest System), let contract 2-story, 83 x 108-ft. flue shop and 2-story, 95 x 300-ft. tank shop, to D. W. McGrath, 801 New 1st Natl. Bank Bldg. Noted Aug. 16.

★Mich., Detroit—Detroit Nut Co., foot of Lycaste Ave., let contract 2-story brick and steel factory addition to Delisle & Cooper, Campau Bldg.

★Mich., Detroit—Dodge Bros., Campau and Hamtramck Aves., will build 600 x 800 ft. munition factory by day labor. About $1,500,000. Noted Nov. 22.

★Mich., Detroit—Ecorse Fdry. & Machine Co. let contract 50 x 350-ft. and 60 x 100-ft. additions to plant here, to A. K. Smith Constr. Co., 8-11 Campau Bldg. About $100,000.

★Mich., Kalamazoo—Monarch Paper Co. let contract 2-story, 70 x 150-ft. warehouse to H. L. Vanderhorst, 601 South Burdick St. About $30,000.

★Wis., Green Bay—Lucia Bros. Motor Car Co., 218-20 North Adams St., let contract 2-story, 125 x 160-ft. garage and repair shop to Fabry Constr. Co., Green Bay. About $30,000.

★Wis., Milwaukee — Rundle Mfg. Co., 27th and Wahl Aves., let contract 2-story, 70 x 150-ft. brick and rein.-con. warehouse to Michie Constr. Co., 300 Camp Bldg. About $40,000.

★Wis., Shawano—Schweers Hardware & Auto Co. let contract 1- and 2-story garage and repair shop to P. Schenk, Shawano. About $25,000.

Industrial Works (Continued)

★**Minn., Minneapolis**—Chadbourne Bros., 825 Palace Bldg., let contract 2-story, 40 x 123-ft. garage to Albinson Constr. Co., Wilmar Bldg. About $40,000.

★**Cal., Sacramento**—Libby, McNeil & Libby, 31st and P Sts., let contract rein.-con. warehouse, to Palmer & Peterson, Monadnock Bldg., San Francisco. About $14,000. Noted Nov. 8.

★**Que., Montreal**—A. R. Whittal Can Co., 740 Mullins St., let contract brick addition to factory to E. Carrigan, 318 Ballantyne Ave., N. About $25,000.

BUILDINGS

Proposed Work

Mass., Fall River—Store—W. J. Doran & Co., 105 South Main St., plans, 3-story, 50 x 85-ft., brick and terra cotta. M. J. Doran, treas.

N. Y., New Rochelle—(Official)—Theater and Store—E. F. Rush, 1482 Bway., New York City, receives bids about Dec. 15,, 2-story. Cost, $150,000. De Rose & Pereira, 150 Nassau St., New York City, archts. Noted Nov. 15.

N. Y., New York—Asylum—Bd. Trustees Hebrew Orphan Asylum, Amsterdam Ave. and 138th St., plans to build group institutional buildings in Wakefield Sect. of Bronx.

N. Y., New York—Office—W. R. Grace & Co., 7 Hanover Sq., having plans prepared by J. W. O'Connor, archt., 3 West 29th St., 7-story, 46 x 70-ft. brick and stone addition at 58-60 Water St. About $200,000.

N. Y., New York—Theater, Store, Etc.—The 181st St. Constr. Co. having plans prepared by De Rosa & Pereira, archts., 150 Nassau St., 5-story, 150 x 200-ft. brick and terra cotta, Bway. and 181st St. About $500,000. S. Morse, 729 7th Ave., pres.

N. J., Fort Lee—High School—Bd. Educ. plans brick and stone. About $125,000. E. G. Kauffer, pres. E. Sibley, archt.

N. J., Jersey City—Nurses' Home and Hospital—City plans $100,000 bond issue for additions to Jersey City Hospital.

N. J., Ocean City — (Official) — Theater, Stores, Etc.—H. E. Wendell, archt., 431 Central Ave., preparing plans for 80 x 250-ft. theater, 2-story, 75 x 125-ft. observation and dance pavilion, 2-story, 75 x 125-ft. stores, 50 x 407-ft. bath house, frame construction and 2-story, 50 x 100-ft. brick swimming pool; also 125 x 400-ft. concrete piling and concrete girders ocean pier.

Pa., Harrisburg—Hotel—F. B. Aldinger, 26 Grace Ave., has purchased Senate Hotel on Market Sq. and plans to replace same with new 10-story structure.

Pa., Phila., City Hall—City plans to improve old city hall, 5th and Chestnut Sts. About $69,000. T. B. Smith, mayor.

Pa., Phila.—School—Oak Lane Country Day School, Oak Lane, Phila., having plans prepared by Magaziner & Eberhart, archts., 603 Chestnut St., 1-story, 500 x 1550 ft., brick. About $150,000.

Pa., Williamsport—School—City Council plans $300 000 bond issue to build 2 new schools.

N. C., Lexington — School — City plans election to vote on about $50,000 bonds to build school.

Ga., Atlanta — Academic — Lanier University plans; about $1,000,000. Also plans to build recreation park, athletic field of 8 acres and swimming pool. C. L. Fowler, pres.

O., Cleveland—Club and Lodge—Lithuanian Societies Home Co. had plans prepared, 3-story, 65 x 115-ft., brick and terra cotta, Superior Ave. and East 6th St. About $50,000. G. S. King, 1345 East 66th St., archt., soon lets contract.

O., Cleveland — Hotel — D. M. Mayer, Peoria, Ill., had plans prepared by W. E. Mooney, archt., 1008 Scovill Ave., S. E., 7-story, 50 x 132 ft., brick and concrete, 1862 to 1866 East 9th St.

O., Cleveland — Office — Oak Investment Co. had plans prepared by A. Graeble, archt., Park Bldg., 11th St. and Walnut Ave. About $300,000.

O., Deshler—School—City voted $80,000 bonds to build school.

O., East Cleveland—(Cleveland P. O.)—Technical High School—Bd. Educ. receives bids about Dec. 5, 3-story. About $200,000. C. Ammerman, clk. W. H. Nicklas, 608-1900 Euclid Ave., archt. Noted July 12.

Ind., Connersville — Bank — Farmers & Merchants Trust Co. having plans prepared by Hoggson Bros., engrs., 485 5th Ave., New York City, 48 x 82½ ft. About $100,000. E. W. Ansted, pres.

Mich., Ann Arbor — Dormitory — State University plans 3-story, 47 x 139-ft. About $100,000. H. B. Hutchins, pres. A. Kahn and E. Wilby, archts., Marquette Bldg., Detroit, soon receive bids.

Mich., Grand Rapids—College—Dominican Sisters plan to build college to consist of 3 buildings, on Fulton Rd. About $100,000.

Mich., Muskegon — Hospital — Sisters of Mercy, Mt. Mercy Home, West Bridge St., Grand Rapids, having plans prepared by Brielmaier & Son, archts., 41 University Bldg., Milwaukee, Wis., 4-story. About $150,000.

Ill., Chicago—Hospital, Etc.—Augustana Hospital Assn. plans 7-story, 50 x 188-ft. ward building, 7-story administration building, 6-story, 40 x 130-ft. nurses' home and 1-story boiler house. About $1,500,000. M. Sturm, 116 South Michigan Ave., archt.

Wis., Milwaukee—Hotel—J. E. Theil & Co., 706 Caswell Blk., having plans prepared for hotel and garage. About $200,000.

Wis., Wausau — School — Bd. Educ. had plans prepared by Swarthout & Speer, archts., Wasau, brick. About $200,000.

Minn., Bloomington—(Minneapolis P. O.)—School—Bd. Educ. having plans prepred by G. L. Lockhart, archt., 391 Endicott Bldg., St. Paul, 1 and 2-story, 59 x 137 ft., and 2 wings, 1-story, 42 x 70-ft. brick, tile and rein.-con. About $70,000. W. McCutchan, R. No. 4, Minneapolis, clk.

Minn., Lakefield—High School and Manual Training Schools—Bd. Educ. rejected bids building 2-story, 60 x 97-ft.; also 2-story, 61 x 96-ft. rein.-con. brick and tile. K. T. Snyder, 933 Plymouth Bldg., Minneapolis, archt. New bids in February. Noted Oct. 18.

Minn., Rochester — Store and Hotel — Knowlton Realty Co. rejected bids 6-story, 110 x 140 ft., cut stone. About $275,000. Noted Oct. 18.

Minn., St. Paul—Exhibition Hall and Barns—State Agricultural Society plans. About $150,000. T. H. Canfield, Como and Snelling Ave., genl. mgr.

Minn., St. Paul—Hospital—Bethesda Hospital plans, on Capitol Blvd., Park and Como Aves., and Viola St. About $500,000. J. A. Krantz, supt.

Minn., St. Paul—Workhouse—City plans election to vote on $475,000 bond issue to build workhouse and garbage-disposal plant. A Goss, comr.

Minn., St. Paul—St. Luke's Congregation plans, Lexington and Summit Aves. About $350,000. J. T. Comes, Resleau Bldg., Pittsburgh, Pa., archt.

Kan., Eureka—Home—Independent Order Odd Fellows plans to build here. About $100,000.

Kan., Manhattan—School—State plans addition to State Agricultural School. About $50,090. C. H. Chandler, State House, Topeka, archt.

Kan., Peabody—High School—Bd. Educ. having plans prepared by G. W. Van Meter, archt., 604 Caldwell-Murdock Bldg., Wichita, for 2-story, 65 x 100-ft. addition. About $50,000.

Kan., Pittsburg—Normal—State Bd. Administration, Topeka, had plans prepared by C. H. Chandler, state archt., Topeka, 3 story, 80 x 250 ft., with wing 90 x 106 ft., brick, concrete, terra cotta and stone. About $200,000.

Kan., Topeka—Hotel—Stock Co., c/o J. F. Renker, 301 Leland St., had plans prepared by Smith, Rea & Lovitt, archts., Finance Bldg., Kansas City, Mo., 10-story.

Neb., Aurora—Schools—Bd. Educ. plans. About $55,000.

Neb., Columbus — Court House — Platte Co. Comrs. let contract about Jan. 1, 4-story. About $100,000. C. Werdeman, Columbus, Neb., archt. Noted Nov. 1.

Neb., Lincoln — Hospital — Bd. Comrs. State Institutions having plans prepared 2-story, 100 x 360-ft. Hospital for Insane. About $190,000. J. H. Craddock, Farnum Bldg., Omaha, archt.

Neb., Omaha—Schools—Bd. Educ. plans to issue $2,250,000 bonds to build schools.

S. D., Minot—Bank and Office—Brush-McWilliams Co. had plans prepared by Tulgren & Son, archts., 1st Natl. Bank Bldg., Milwaukee, Wis., 6-story, 25 x 140-ft. About $100,000. C. H. Mott, 46 Main St., pres.

N. D., Bismarck—Chemistry—University of North Dakota having plans prepared by F. W. Keith, Bismarck, archt. About $90,000.

N. D., Minot—Hotel—Million Dollar Hotel Co., Inc., soon lets contract, 8-story, 75 x 146 ft. About $450,000. G. J. Hoffman & Co., Rochester, Minn., archts.

N. D., Wahpeton — Hospital — Lutheran Deaconess Hospital having plans prepared by W. F. Kurke, archt., Huntington Bl., Fargo, 3-story, brick. About $50,000.

Mont., Billings—Bank—Merchants Natl. Bank & Merchants Loan Co. to build here, 7-story, fireproof. About $400,000.

Mo., Kansas City—Church—First Christian congregation having plans prepared by Shepard, Farrar & Wiser, archts., 1292 R. A. Long Bldg., 32 x 76 ft. About $100,000. Address F. N. Daniels, 9th St. and Denver Ave.

Mo., Kansas City—Church—Holy Name congregation soon lets contract, 2-story, 101 x 166 ft. About $200,000. J. Fowler, 2201 Benton Bldg., rector. Wight & Wight, 401 1st Natl. Bank Bldg., archts.

Mo., Kansas City—Library and School—Bd. Ed. having plans prepared by C. A. Smith, archt., 602 Finance Bldg. About $150,000.

Mo., Kansas City—Masonic Temple—Ivanho Masonic Lodge plans, 3-story, 90 x 125-ft., stone and rein.-con. About $175,000. Smith, Rea & Lovett, archts., 602 Finance Bldg., receiving bids about Jan. 1. J. O. Christensen, 3131 Campbell St., chn. bldg. com.

Mo., St. Louis—Store—Bear & Fuller, 6th and Washington Sts., having plans prepared by Mauran, Russel & Crowell, archts., Chemical Bldg., for addition. About $300,000.

Mo., St. Louis—Theater and Apartment—F. L. Cornwell, La Salle Bldg., having plans prepared by H. J. Harker, archt., 810 Chestnut St., 9-story, 175 x 326 ft. About $800,000.

Tex., Arlington—Administration—Grubbs Vocational College soon lets contract, 70 x 125 ft., brick and concrete. About $100,000.

Tex., Arlington—Home—Berachah Home plans. About $50,000. J. T. Upchurch, supt.

Tex., Dallas — Station — City plans to build fire station, Augusta St. and Columbia Ave. About $50,000. A. Magee, fire ch.

Tex., Dallas—Store—Overland Automobile Co., 2426 Commerce St., soon lets contract, 2 story, South Ervay and Cadiz Sts. About $150,000. Lang & Witchel, 1613-15 Southwestern Life Bldg., archts.

Tex., Dallas—Synagogue—Shareth Israel Congregation plans. About $75,000. L. Klineman, pres.

Tex., Ft. Worth—Schools—City election soon to vote on $400,000 bond issue to build schools; plans of Bd. Educ. include building high school, $125,000, wing to present high school and school auditorium, $240,000.

Okla., Okmulgee — Hospital — City had plans prepared by Smith, Rea & Lovitt, archts., Terminal Bldg., Kansas City, Mo., 3 story, 40 x 80 ft., steel, concrete, and brick. About $50,000.

Okla., Pauls Valley—Court House and Jail—Garvin Co. at recent election voted $150,000 bond issue to build courthouse and jail. Noted Oct. 18.

Idaho, Caldwell—Office—C. H. Sebree, Caldwell, having plans prepared by R. E. Field, archt., Binz St., Houston, Tex., 5 story, steel, Arthur and Kimball Sts. About $80,000.

Ariz., Jerome — Hotel and Apartment House—United Verde Extension Mining Co. had plans prepared by Lescher & Kibbey, archts., Bank of Arizona Bldg., Phoenix, 3-story, 55 x 200-ft. concrete hotel, and 3-story, 70 x 60-ft. concrete apartment house. About $125,000.

Ariz., Tucson—Schools—City election Dec. 8 to vote on $50,000 bond issue to build schools.

Ore., Baker—Swimming Pool—City plans election Dec. 3. to vote on $54,000 bond issue for swimming pool.

Buildings (Continued)

Cal., Bay Point—School—Bd. Educ. having plans prepared by J. T. Narbett, archt., 9th and McDonald St., Richmond, for additions and alterations. About $50,000.

Cal., Fresno—Cathedral—Scottish Rite Lodge soon lets contract, 3-story, rein.-con. and brick. About $200,000. C. Werner, Phelan Bldg., San Francisco, archt.

Cal., Sacramento—Home—Chamber of Commerce soon lets contract, 2 story, on 7th St. Cost between $60,000 and $75,000. C. Virden, pres. Noted Oct. 11.

Cal., Sacramento—Store—Weinstock Lubin Co., 4th and K Sts., plans, 10 story, 160 x 210 ft., 9th and L Sts. About $1,000,000.

Cal., San Francisco—Store—J. D. and A. B. Spreckles having plans prepared by G. A. Applebarth, archt., Claus Bldg., 5-story, at Harrison and Spear Sts. About $200,000.

Cal., San Francisco—Theater—Colonial Theater Co. having plans prepared by C. Werner, archt., Phelan Bldg., Clement St. and 9th Ave. About $125,000.

Cal., San Pedro—Y. M. C. A. plans 3-story, 100 x 160 ft. building. About $200,000. D. E. Luther, Los Angeles, secy.

Que., Verdune—School—School Comrs. plan, 3-story, brick and stone. Cost $175,000. J. E. A. Benoit, archt., 1290 Wellington St., receives bids about December.

Ont., Toronto—Store—F. Stollery plans, Yonge and Bloor Sts. About $100,000.

Man., Winnipeg—Schools—Bd. Educ. plans to build 4 schools. About $500,000. W. H. Champion, 206 Butland St., secy.

Sask., Saskatoon—High School—High School Bd. plans addition. About $150,000 J. F. Cairns, chn.

BIDS DESIRED

N. H., Nashua—High School—Until Dec. 1, by Bd. Educ., 3-story, 152 x 183-ft. brick and stone school and auditorium. About $200,000. T. M. James, 185 Devonshire St., Boston, archt. Noted Sept. 6.

N. Y., New Platz—(Official)—School—Until Dec. 17, by Dr. T. E. Finegan, deputy comr. educ., Albany, for addition to State Normal School; advertised in this issue.

N. Y., New York—(Official)—Synagogue—Until Jan. 15, by Bnai Israel congregation. J. Adler, 19 West 26th St., pres. E. Roth, 119 West 40th St., archt.

Fla., Miami—School—Until Dec. 4, by Dade Co., Bd. Pub. Instruction, building North Side School, concrete and hollow tile; also for addition to Highland Park and Buena Vista Schools. About $50,000. R. E. Hall, supt. A. E. Lewis, Real Estate Bldg., archt.

O., Kenmore—(Official)—High School—Bd. Educ. to sell $140,000 bonds Dec. 10, to build high school. I. W. Fiscus, clk.

Kan., Pittsburg—Normal—Until Dec. 17, by State Bd. Administration, Topeka, 3-story, 86 x 247 and 96 x 100 ft., brick, stone and rein.-con. About $200,000. C. H. Chandler, Topeka, state archt. Noted Nov. 22.

N. M., Gallup—(Official)—High and Grade School—Until Dec. 15, by Bd. Educ., to be built on tract of land north of Sante Fe R.R. tracks. C. L. Wilson & Co., Amer. Natl. Bank Bldg., Monrovia, Cal., archt.

Cal., Patton—(Official)—Cottage—Until Dec. 4, by W. F. McClure, state engr., Forum Bldg., Sacramento, building Cottage No. 17 at Southern California State Hospital.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn—Bank—Peoples Natl. Bank, 1336 Bway, let contract 1-story, 48 x 106 ft., brick and marble, Quincy St. and Ralph Ave., to J. Auer & Sons, 648 Lexington Ave. About $100,000. Noted Nov. 22.

★N. Y., Buffalo—Church—St. Nicholas Ruthenian congregation let contract, 1-story, 80 x 92 ft., Fillmore and Oneida Aves., to Niedepruem Bldg. Co., 1170 Jefferson St. About $80,000. Noted Aug. 23.

N. Y., Central Islip—(Official)—Acute Patients' Building—State Hospital Comn., Albany, received low bids Nov. 14, building addition to Central Islip State Hospital, from B. J. Raynor, Islip, $89,660; Stewart Willey Co., Inc., 1123 Bway., New York City, $92,000; M. Kantrowitz, 20½ Market St., Albany, $94,000. Noted July 19.

★N. J., Red Bank—School—Bd. Educ. let contract building on Park Pl. to I. R. Taylor & Co., R. R. Ave., Asbury Park. About $73,330. Noted Nov. 8.

★Pa., Chester—High School—Bd. Educ. let contract 4-story, 120 x 245-ft. stone and rein.-con., to J. R. Wiggin, 1215 Filbert St., Phila. About $200,000. Noted Oct. 25.

★Pa., Pittsburgh—Store—E. F. Baird, Ferry St., let contract 3-story, brick, to Toupet, Beil & Conley, office 5931 Penn Ave., Pittsburgh, Pa. About $50,000.

★Md., Baltimore—Y. M. C. A. let contract 4-story, 60 x 100-ft., brick and rein.-conc. building on Druid Hill Ave. and Delphin St. to G. R. Morris, Title Bldg. About $100,000.

★Fla., Tallahassee—Dormitory and Educational—Florida State College for Women let contract to O. C. Parker & Co., Tallahassee, $82,701. Noted Nov. 1.

Ala., Bessemer—Court House and Jail—Jefferson Co. let contract to Evans Bros., 2312 Ave. F., about $95,000. Noted July 19.

★O., Cleveland—See "Industrial Works."

★O., Cleveland Heights (Warrensville P. O.)—School—Bd. Educ. let contract, 2-story, 82 x 164-ft., to R. H. Evans & Co., Columbus Savings & Trust Bldg., Columbus. About $200,000.

★Ia., Ventura—School—Bd. Educ. let contract, 3-story, brick and rein.-con., in Consolidated Dist., to C. Rye, Mason City. About $50,000. Noted Aug. 2.

★Cal., Livermore—Hospital—Alameda Co. let contract building tuberculosis hospital to W. G. Thornally, 3027 16th St., Oakland, $52,985. Noted Sept. 6 under Oakland.

★Ont., London—Hospital—Hospital Comn., Ottawa, let contract, brick and rein.-conc., to J. Hayman & Sons, 432 Wellington St. About $200,000. Noted June 28.

FEDERAL GOVERNMENT WORK

Proposed Work

N. Y., New York—Electric Traveling Cranes—Bureau Yards and Docks, Navy Dept., Wash., plans to install electric traveling cranes for use in extension to machine shop in Navy Yard; specification No. 2720. About $76,000.

N. Y., New York—Repairs to Structural Steel Work of Terminal Building—Bureau Yards and Docks, Navy Dept., Wash., plans; Specification No. 2724.

Pa., Ft. Mifflin—Office—Bureau Yards and Docks, Navy Dept., Wash., plans; Specification No. 2725. About $14,000.

Md., Indian Head—Extension to Power House—Bureau Yards and Docks, Navy Dept., Wash., plans to build extension to power house; Specification No. 2722. About $29,000.

Wash., D. C.—Aviation Stations—War Dept., Signal Corps, soon lets contract for aviation stations in Alabama and Florida, exact location not given, also at Sam Houston, Tex.

Wash., D. C.—Crane Runways—Bureau Yards and Docks, Navy Dept., plans to install in Gun Park; Specification No. 2721. About $140,000.

Wash., D. C.—Motor Generator Sets—Bureau Yards and Docks, Navy Dept., preparing plans installing in Phila., Norfolk, Va., New York and Wash., D. C. navy yards.

Wis., Rhinelander—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., receiving bids in December, 1-story, 55 x 70 ft., brick and concrete. About $90,000.

Mo., Harrisville—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Nov. 13. Noted Nov. 22.

Ark., Lonoke—Aviation School—War Dept. soon lets contract for one unit, 2-squad school to be built here. About $750,000.

Cal., Bakersfield—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Oct. 24. Noted Nov. 1.

BIDS DESIRED

R. I., Newport—Garage—Until Dec. 10, by Bureau Yards and Docks, Navy Dept., Wash., building at Naval Training Sta.; Specification No. 2688. Noted Nov. 8.

Conn., New London—Cranes—Until Dec. 10, by Bureau Yards and Docks, Navy Dept., Wash., furnishing and installing on runway rails, one 5-ton, 3-motor bridge crane; one 2-ton hand-operated bridge crane in machine shop at Submarine Base; Specification No. 2701.

Conn., New London—Removal of Wall—Until Dec. 3, by Commander, Submarine Base, New London, removing 300 cu.yd. concrete wall; Specification No. 2712.

N. Y., New York—Dredging—Until Nov. 30, at U. S. Engr. Office, 39 Whitehall St., New York, dredging and rock removal in East River.

Pa., Phila.—Cranes—Until Dec. 10, by Bureau Yards and Docks, Navy Dept., Wash., installing in galvanizing plant; Specification No. 2699. About $20,000.

Pa., Phila.—Dredging—Until Dec. 21, at U. S. Engr. Office, Phila., dredging in Delaware River on Baker and Liston lighthouse ranges.

Pa., Phila.—Piping, Etc.—Until Dec. 10, by Bureau Yards and Docks, Navy Dept., Wash., furnishing and installing piping tunnel, piping, valves, fittings, hydrants and accessories necessary for complete steam, hot water, compressed air, Delaware River water, fresh water and fuel-oil distributing systems at Navy Yard; Specification No. 2694. Noted Nov. 8.

Wash., D. C.—Grading—Until Dec. 3, at office of Comrs. Dist. Columbia, grading 41,300 cu.yd. L. Brownlow, comr.; advertised in this issue.

Wash., D. C.—Surveying Instruments—Until Dec. 3, by Supt. U. S. Coast and Geodetic Survey, 205 New Jersey Ave., S. E., Wash., advertised in this issue.

Fla., Key West—Tank and Tower—Until Dec. 6, by Comr. Fisheries, Dept. Commerce, Wash., D. C., building concrete tank and tower at Biological Sta.

Fla., Santa Rosa—Wharf and Boathouse—Until Dec. 17, by E. P. Bertholf, capt. commandant, U. S. Coast Guard, Wash., D. C., building wharf and boathouse at Sta. No. 212, Santa Rosa; advertised in this issue.

Tex., Galveston—Riprap—Until Dec. 14, by U. S. Engr. Office, Galveston, furnishing and delivering riprap at Port Aransas or Rockport, Tex., advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Me., Caribou—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids from O. Nelson Co., Bangor, $48,252; E. T. Abbott Constr. Co., 133 Bway., New York City, $53,300; T. W. Cissell, Newark, O., $54,490. Noted Oct. 18.

★Mass., Boston—Timber Bulkhead—Bureau Yards and Docks, Navy Dept., Wash., let contract to W. L. Miller Co., 171 Alford St., $7290. Noted Nov. 22.

★Mass., Chelsea—Draining and Filling—Bureau Yards and Docks, Navy Dept., Wash., let contract, draining and filling at Naval Hospital Reservation, to Howard Bros., 412 Dorchester Ave., Boston, $5950.

★Mass., Chelsea—Heating, Plumbing and Lighting—Bureau Yards and Docks, Navy Dept., Wash., let contract installing in Emergency Hospital, items 1, 5 and 8, to Buerkel & Co., 24 Union Park St., Boston, $248,991. Noted Nov. 22.

★N. Y., New York—Aircraft Storage and Aircraft Repair for Export—Bureau Yards and Docks, Navy Dept., Wash., let contract to Austin Co., Bulletin Bldg., Phila., $269,850 work complete, $198,800, structural steel to be used. Noted Nov. 22.

★N. Y., New York—Pneumatic Tube System—Bureau Yards and Docks, Navy Dept., Wash., let contract (work complete) to Lamson Co., 100 Boylston St., Boston. $25,832. Noted Nov. 22.

★N. Y., New York—Reconstructing Hospitals—War Dept. (I. W. Littell, brig. genl.), let contract to W. Crawford, 7 East 42nd St., cost plus %.

★N. J., Little Silver—Buildings—War Dept., Signal Corps, let contract buildings in connection with additional supply depot, Camp Alfred Vail, to C. R. Hennden, Jersey City. Cost plus %. About $250,000. Noted Nov. 15.

Federal Government Work (Continued)

N. J., Woodbury—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids from Hagen Lumber Co., Hickory and Mattes St., Scranton, Pa., $53,698; E. T. Abbott Constr. Co., 1133 Bway., New York City, $54,210; T. W. Cissell, Newark, O., $55,470. Noted Oct. 25.

★Pa., Ft. Mifflin — Buildings—Bureau Yards and Docks, Navy Dept., Wash., let contract building addition to Building No. 62; also new steel building, to George & Borst, 277 South 11th St., Phila., $14,489.

★Pa., Phila.—Fitting out Piers—Bureau Yards and Docks, Navy Dept., Wash., let contract 3 fitting out piers to Snare & Triest, 233 Bway, New York City, $465,000. Noted Nov. 22.

Pa., Phila. — Marine Barracks — Bureau Yards and Docks, Navy Dept., Wash., received low bids (work complete), from McCloskey & Bahl, 1620 West Thompson St., $213,547; Price Constr. Co., 216 Maryland Trust Bldg., Baltimore, $227,000; W. R. Dougherty, 1608 Sansom St., Phila., $230,000. Noted Nov. 15.

★Pa., Phila.—Tank and Tower—Bureau Yards and Docks, Navy Dept., Wash., let contract (work complete), to Memphis Steel Constr. Co., Magee Bldg., Pittsburgh, $16,864. Noted Nov. 22.

★Pa., Phila.—Temporary Building—Bureau Yards and Docks, Navy Dept., Wash., let contract, temporary building for marine corps, to McCloskey & Bahls, 1620 Thompson St., Phila., $29,476.

Md., Indian Head—Artesian Wells—Bureau Yards and Docks, Navy Dept., Wash., received low bids for additional artesian water supply at Naval Proving Ground, (a) work complete, (b) work complete with modification, from E. Christman, 416 McClymonds Bldg., Massillon, O., (a) $93,472, 120 days, (b) $55,685, 120 days; J. L. Sweigard & Co., Lincoln Bldg., Phila., (b) $115,850, 180 days.

Md., Indian Head—Powder Dry Houses —Bureau Yards and Docks, Navy Dept., Wash., received low bids building 23 powder dry houses at Naval Proving Grounds, (a) net price for work complete, using either galvanized iron or asbestos protected metal, (b) net price for work complete, using either galvanized iron or asbestos metal on roof and timber siding on exterior walls, (c) net price for work complete, using asbestos shingles on roof and timber sidings on exterior walls, (d) net price for work complete, using asbestos shingles on roof and sides, (e) net price fofr each additional cubic foot of brick on concrete piers and walls over quantity shown on drawings, from J. H. Nolan Constr. Co., Munsey Bldg., Wash., D. C., (a) $253,677; Austin Co., 1026 Bulletin Bldg., Phila., (a) $322,146, (b) $317,926, (c) $299,389, (d) $305,502, (e) $0.50; Dawson Constr. Co., May Bldg., Pittsburgh, (a) $341,780, (b) $332,456, (c) $327,428, (d) $332,120, (e) $0.40; Snare & Triest, 233 Bway., New York City, (a) $376,400, (b) $372,800, (c) $372,200, (d) $376,000, (e) $0.60. Noted Nov. 22.

★Wash., D. C.—Addition to Forge Shop —Bureau Yards and Docks, Navy Dept., let contract building at Navy Yard, to Boyle Robertson Constr. Co., Evans Bldg., $117,874. Noted Nov. 22.

Wash., D. C.—Alterations to Office Building—J. A. Wetmore, superv. archt., treas. dept., received low bids for alterations to building at 500-508 14th St., N.W., from W. E. Mooney, Evans Bldg., $51,713; F. L. Wagner, 1413 H St., N.W., $55,400.

Wash., D. C. — Bridge — Comrs. Dist. Columbia, District Bldg., received low bids building 7 span steel girder highway bridge abutments, piers and approaches, over tracks Philadelphia, Baltimore & Washington R.R., Benning Rd., item 1, approaches, item 2, work complete, design A and B, from Penn Bridge Co., Bond Bldg., item 1, $83,600, 2a. $101,730, 2b, $81,000; F. J. Boas, 201 North Broad St., Phila., item 1, $102,000, 2a, $105,000, 2b, $99,000; C. H. Tompkins, 1883 3rd St., N.W., 2a, $99,000, 2b, $91,000. Noted Nov. 1.

Wash., D. C.—Fitting Out Cranes—Bureau Yards and Docks, Navy Dept., Wash., received low bids furnishing 3 electrically operated fitting-out cranes of 350 gross ton capacity at Navy Yards, Norfolk, Va., New York and Phila., (a) 3 cranes, complete, (b) with modification, (c) 1 crane Phila., (d) same with modification, (e) 1 crane Norfolk, (f) same with modification, (g) 1 crane New York, (h) same with modification, from McMyler Interstate Co., Bedford, O., (b) $2,449,975, (d) $840,325 for 1 crane only and $820,326 each for 3 cranes, (f) $843,925 for 1 crane only and $823,925 each for 3 cranes, (h) $841,125 for 1 crane only and $821,125 each for 3 cranes; alternate A same as above, alternate B, (b) $2,409,975, (d) $827,771 for 1 crane only, $807,701 each for 3 cranes, (f) $831,371 for 1 crane, $811,371 each for 3 cranes, (h) $828,571 for 1 and $808,570 each for 3 cranes, alternate C, same as B; time as specified: Wellman-Seaver-Morgan Co., 7000 Central Ave., Cleveland, (a) $2,414,000, delivery 1 in 540 days, 1 in 720 days and 1 in 900 days; (c),(e), (g), $836,900 each, time 540 days; Webb & Ryan, Grand Central Terminal, New York City, cost plus percentage. Noted Oct. 18.

★Wash., D. C.—Pier and Bulkhead—Bureau Yards and Docks, Navy Dept., Wash., let contract building at Hampton Roads, Va., Proposition "A" to J. Stewart & Co., 30 Church St., New York City; Proposition "B" to H. P. Converse, 88 Broad St., Boston, cost plus percentage. Noted Nov. 22.

★Va., Norfolk—Wood Block Floors—Bureau Yards and Docks, Navy Dept., Wash., let contract (no dredging), to H. P. Converse & Co., 88 Broad St., Boston, Mass., $500,000.

★Va., Norfolk—Wood Block Floors—Bureau Yards and Docks, Navy Dept., Wash., let contract building wood block floors in various shops, to Wyckoff Pipe & Creosoting Co., 30 East 42nd St., New York City, $26,438.

★Ga., Forsyth—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to H. B. Wilder, Columbus Rd., Macon, $36,697. Noted Nov. 22.

Wyo., Basin—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids (a) wood girders, (b) steel girders, from W. D. Lovell, 1415 South East 8th St., Minneapolis, (a) $35,700, (b) $36,500; J. H. Wiese, 1301 Citizens National Bank, Omaha, Neb., (a) $38,780, (b) $39,405; C. Weitz Sons, 713 Mulberry St., Des Moines, Ia., (a) $40,500, (b) $41,000. Noted Oct. 25.

★Tex., Austin—Remodeling Court House, Etc.—Bureau Yards and Docks, Navy Dept., Wash., let contract to Walsh & Burney, 528 Littlefield Bldg., $22,806.

MISCELLANEOUS

Proposed Work

Shaft—New York, N. Y.—(Official)—Pub. Ser. Comn., 120 Bway., rescinded contract let to I. J. Stander & Co., Inc., 118 East 28th St. Noted Oct. 4.

Pier—Ocean City, N. J.—(Official)—See "Buildings."

Park Improvements — Trenton, N. J. — City plans to improve Assanpink Park. About $20,000. J. W. Thompson, Broad St. Bank Bldg., archt.

Parks—Lansford, Pa.—See "Sewers."

Wharf—Fayetteville, N. C.—City plans to build wharf, also road leading to same.

Park, etc.—Atlanta, Ga. — See "Buildings."

Wharf — Florence, Ala. — City plans to build wharf.

Terminals — Sheffield, Ala. — City plans election to vote bonds to build rail-to-water terminal facilities.

Subway—Cleveland, O.—H. L. Davis, mayor, appointed C. J. Neal, Fielder Sanders, M. A. Bradley, C. E. Adams and C. A. Otis as commission to make preliminary surveys, adopting plans, which must be given popular approval, after which contracts will be awarded, for subway system. This commission will supervise construction of subway and after terminals are built will have charge of same. Proposed subway will run from high level bridge at West 6th St. and Superior Ave. to Pub. Sq., Euclid and St. Clair Aves. and 9th and Ontario St. Noted Apr. 12.

Park—Lakewood, O. — Council plans to sell $300,000 bonds for public park, Lake Ave. at foot Belle Ave.

River Improvements — Lima, O. — City voted $100,000 bonds for river improvements. C. Bryson, city engr.

Dock—Detour, Mich.—U. S. Steel Corp., 71 Bway., New York City, having plans prepared by Cleveland office for large coaling dock here.

Breakwater — Milwaukee, Wis.—Harbor Comrs. plan to build 600-ft. stone breakwater opposite north end Jones Island. Bond issue of $500,000 planned for project.

Garbage Disposal Plant—St. Paul, Minn. —See "Buildings."

Dam—Stevensville, Mont.—City plans to build 600-ft. dam across Bitter Root River, 10 mi. south of city.

Channel—Beaumont, Tex. — City voted $300,000 bonds to deepen Beaumont ship channel. J. F. Weed, engr. navigation dist. Noted July 12.

Transmission Line—Dallas, Tex.—Texas Power & Light Co. plans to build 7-mi. transmission line to connect at Norwood and Trinity Heights with lines of Dallas Power & Light Co. About $250,000. F. R. Slater, 1332 Commerce St., vice-pres.

Park Improvements—Oklahoma, Okla.—City voted $300,000 for park improvements.

Flood Control—Sacramento, Cal.—State Rec. Bd. ordered construction of entire bypass system in Butte and Sutter Basins as called for by Sacramento River flood-control project, estimated to cost, $14,993,190, including right-of-way, incidental expenses, etc. Flood-control engineer estimated cost of Sutter By-Pass, 31.2 mi., 4000 to 6000 ft. wide, at $7,099,638; Tisdale By-Pass, 4.25 mi., 1000 ft. wide, $799,225; Butte Slough By-Pass, 5.75 mi., 4000 ft. wide, $649,705; Butte By-Pass, 12 mi., 3300 to 4500 ft. wide, $5,264,437. Plans contemplate diversion of 185,000 second-feet of flood water from Sacramento River at Moulton weir, 14 mi. above Colusa and carrying it through Butte and Sutter Basins and discharging it over Fremont weir into Yolo By-Pass.

Transmission Line—Greenwood, B. C.—West Kootenay Power & Light Co. plans to build transmission line from Greenwood to Princeton and Copper Mountain, about 100 mi. L. A. Campbell, Rossland, B. C., genl. mgr.

BIDS DESIRED

Plumbing and Electrical Work — Phila., Pa. — (Official) — Until Dec. 4, by W. S. Twining, dir. dept. city transit, 754 Bourse Bldg., installing plumbing and electrical work in station buildings at Orthodox-Margaret Sts. and Ruan-Church Sts., Contrs. Nos. 539 and 540; Frankford Elevated Ry.; advertised in this issue.

Improving Harbor—Newport, Ore.—Until Jan. 2, by L. Wade, secy. joint ports, furnishing stone and building south jetty at entrance to Yaquina Bay; advertised in this issue

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

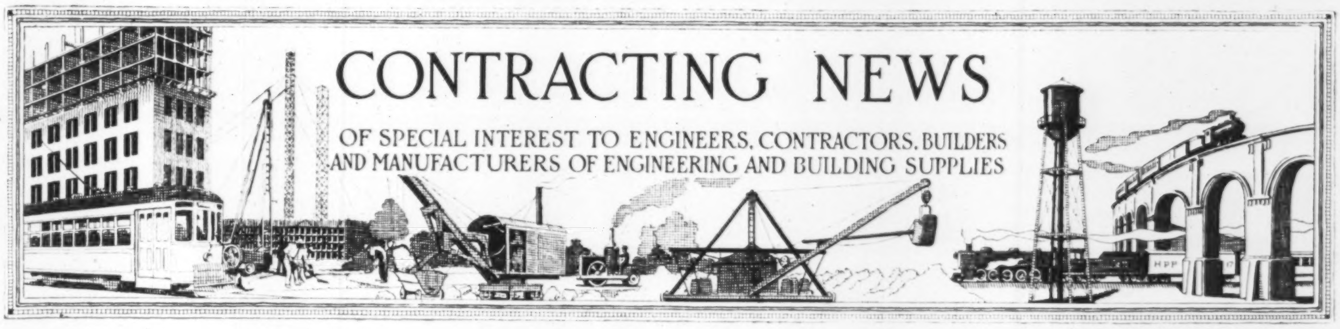
★Bulkhead—Boston, Mass.—Park & Recreation Dept., 33 Beacon St., let contract grading and building bulkhead on Tenean Beach, Ward 20, to A. Baruffaldi, 5 Parker Pl., Somerville, $78,594. Noted Nov. 8.

★Foundation—Middletown, Mass.—Essex Co., Salem, let contract building rein.-con. foundation for Tuberculosis Hospital to F. W. Hammond, 18 Columbus Ave., Beverly, Mass., $25,318.

★Foundation—Cleveland, O.—Bd. Control let contract building rein.-con. foundations for Public Hall, East 6th and Lakeside Sts., to Hunkin-Conkey Constr. Co., 320 Cuyahoga Bldg., $65,288.

★Incinerator—Okmulgee, Okla.—City let contract building garbage-disposal plant to W. McCanse, Durant, $17,150. Noted Nov. 1.

Cement—Winnipeg, Man.—City received only bid furnishing cement for 1918 for Greater Winnipeg aqueduct work, from Canada Cement Co., $3.06 per bbl. gross and $2.61 per bbl. net.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by heavy type; decline, by *italics*.

PIG IRON

Below are the present quotations with a comparison of a month and a year ago

	Dec. 1, 1917	One Month Ago	One Year Ago
CINCINNATI			
No. 2 Southern foundry....	**$35.90**	$33.00	$24.46
No. 2 Northern basic......	34.26	....	28.26
NEW YORK			
No. 2X Northern foundry..	34.25	34.25	29.00
No. 2 plain Northern foundry	33.75	33.75	28.50
No. 2 Southern foundry†...	**38.75 to 39.25‡**	37.25	28.00
BIRMINGHAM			
No. 2 Southern foundry....	33.00	33.00	22.00
CHICAGO			
No. 2 Northern foundry....	33.00	33.00	27.00
No. 2 Southern foundry....	37.00	37.00	....
PITTSBURGH			
Bessemer iron*............	37.25	36.30	34.45
Basic iron*...............	33.00	33.00	30.00

*These prices include the freight charge from the valley to the Pittsburgh district. †Delivered Tidewater, New York. ‡Rail and water.

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per 100 lb. f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	Dec. 1, 1917	One Year Ago	Dec. 1, 1917	One Year Ago
Standard bessemer rails....	$38.00	$38.00	$38.00	$38.00
Standard openhearth rails..	40.00	40.00	40.00	40.00
Light rails, 8 to 10 lb.....	*43.50*	50.00	*43.50*	47.00
Light rails, 12 to 14 lb....	*39.00*	49.00	*39.00*	46.00
Light rails, 25 to 45 lb....	*30.00*	47.00	*30.00*	44.00

Note—Reported that rerolled rails are higher than new rails rolled from billets.

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh				
	Dec. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco
Standard railroad spikes, 9/16-in. and larger......	**$5.00 to 5.50**	$2.65	$5.00	$6.45 base	$7.25
Track bolts, square nuts..	**7.00 to 8.50**	3.25	6.25	Premium	8.80
Standard section angle bars	*3.50 to 4.00*	2.00	4.50	Premium	4.65

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

	Material	7 In. x 9 in. by 8 Ft. 6 In.	6 In. x 8 in. by 8 Ft.
New York	Yellow Pine	$1.30	$1.06 to **1.11**
St. Louis	White Oak	1.00	.75
Chicago	Plain	.97	.82
Chicago.......	Creosoted	1.30	1.15
San Francisco..	Green	**1.13**	**.80**
San Francisco..	Creosoted	**2.02**	*1.43*

PIPE

PIPE—The following discounts are for carload lots f.o.b. Pittsburgh, basing car of Nov. 5, by Government, for steel, iron still being of May 1:

Steel			Iron		
Inches	Black	Galvanized	Inches	Black	Galvanized
BUTT WELD					
¾ to 3.......	*51%*	*37½%*	¾ to 1½......	33%	17%
LAP WELD					
2............	*44%*	*31½%*	1¼	18%	3%
2½ to 6......	*47%*	*34½%*	1½	25%	11%
7 to 12......	*44%*	*30½%*	2	26%	12%
13 and 14......	*34½%*	....	2½ to 6......	28%	15%
15	*32%*	....	7 to 12.......	25%	12%
BUTT WELD, EXTRA STRONG PLAIN ENDS					
¾ to 1½......	*49%*	*36½%*	¾ to 1½......	33%	18%
2 to 3.........	*50%*	*37½%*			
LAP WELD, EXTRA STRONG PLAIN ENDS					
2............	*42%*	*30½%*	1¼	19%	4%
2½ to 4.......	*45%*	*33½%*	1½	25%	11%
4½ to 6.......	*44%*	*32½%*	2	27%	14%
7 to 8.......	*40%*	*26½%*	2½ to 4......	29%	17%
9 to 12.......	*35%*	*21½%*	4½ to 6......	28%	16%
			7 to 8........	20%	8%
			9 to 12........	15%	3%

From warehouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded...........	38%	*42.8%*	*40.1%*
3½ to 6 in. lap welded...........	18%	*38.8%*	*36.1%*

	Galvanized		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded...........	22%	*27.8%*	*27.1%*
3½ to 6 in. lap welded...........	List	*18.8%*	*22.1%*

Malleable fittings, Class B and C, from New York stock sell at 5 and 5% from list prices. Cast iron, standard sizes, 34 and 5%.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York						
	Dec. 1, 1917	1 Month Ago	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4 in.	$59.50	$59.50	$34.50	**$58.35**	**$57.00**	**$66.40**	**$62.00**
6 in. and over	56.50	56.50	31.50	**55.35**	**54.00**	**63.40**	**59.00**

Gas pipe and 16-ft. lengths are $1 per ton extra.
Note—Advances due to Government price-fixing.

CLAY DRAIN TILE—The following prices are per 1000 lin.ft.:

	New York					
Size, In.	Dec. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$23.00	$18.40	$15.00	$26.25	**$24.00**
4	51.00	32.45	20.70	18.00	34.75	**36.00**
5	65.00	45.00	28.75	23.00	48.75	**48.00**
6	90.00	56.55	40.25	27.00	67.50	**64.00**
8	130.00	98.50	74.75	55.00	....	**120.00**

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York					
Size, In.	Dec. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$0.093	$0.0725	.....	$0.09	$0.075	$0.1032
4	.093	.0725	.....	.10	.10	.1032
5	.1395	.12	.....	.135	.12	.1548
6	.1395	.12	$0.12	.15	.15	.1548
8	.217	.165	.165	.21	.225	.215
10	.3255	.24	.23	.315	.30	.301
12	.4185	.30	.33	.405	.40	.387
15	.558	.405	.50	.54	....	.559
18	.775	.57	.75	.75	.75	.731
20	.93	.675	.90	.90	.962	.86
22	1.24	.90	1.13	1.20	....	1.118
24	1.395	.975	1.28	1.35	1.375	1.29
27	2.08	1.665	1.30	....	....	1.935
30	2.304	2.035	1.70	....	....	2.365
33	3.06	2.625	2.25	....	....	3.05
36	3.485	2.94	2.50	....	....	3.44

	Boston	St. Paul	Denver	Los Angeles	Seattle
3	$0.099	**$0.09**	$0.09	**$0.0675**	**$0.0825**
5	.1485	**.135**	.18*	**.1125**	......
8	.231	**.1875**	.25	**.2025**	**.2475**
12	.4455	**.3375**	.40	**.36**	**.48**
24	1.485	**1.44**	1.35	**1.25**	**1.75**
36	3.69	**3.00**	3.00*	.....	.....

*Denver: 6-in. and 30-in.

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices in tank cars 8000 gal. minimum f.o.b. places named:

St. Louis, 45-50% asphalt....................	$0.06½
Chicago, 15-20% asphalt....................	.06½
Chicago, 100% dust layer....................	.08½
Dallas 40-50% asphalt....................	.07
Dallas, 60-70% asphalt....................	.08
Dallas, 75-90% asphalt....................	.09
San Francisco, 75-95% asphalt....................	1.90*

*Per barrel of 42 bulk gallons.

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York..............	Texaco	$30.00	....
New York	Mexican	28.00	$20.00
Chicago	Mexican	25.00	21.00
St. Louis..............	Stanolind	21.00	17.00
San Francisco	California	16.50	13.50
Dallas	Texaco and Mexican........	25.00	23.00
Seattle..............	....	**19.00**	....
Denver..............	Trinidad	31.00	....
Denver	California	23.00	....
St. Paul..............	Trinidad	**26.50**	....

PAVING STONE—

New York	Manhattan	$2.50	sq.yd.
	Other boroughs	2.25	sq.yd.
New York..........	5-in. granite	2.55	sq.yd.
Chicago	About 4x8x4 dressed..........	2.25	sq.yd.
	About 4x8x4 common..........	1.80	sq.yd.
San Francisco	Basalt block 4x7x8	57.75	per M
St. Paul..........	Sandstone	1.65	sq.ft.
Boston	5-in. granite	2.55	sq.yd.

FLAGGING—

		Dec. 1, 1917	
New York	Bronx	$0.17	sq.ft.
	Manhattan	.18	sq.ft.
	Queens, 5 ft. square..........	.19	sq.ft.
	5x20-in. cross-walk	.30	sq.ft.
Chicago	18 in. wide	.75	lin.ft.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd
New York	3½	16	$2.00
New York	4	16	2.25
Chicago	4	16	1.85
Chicago	3½	16	1.70
Chicago	City specifications		2.10
St. Louis	3½	16	**1.81**
St. Louis	4	16	**2.04**
Seattle	4	16	*1.53*
St. Paul	Minneapolis specifications		2.00
New Orleans	3½	16	2.30
New Orleans	4	16	2.60
San Francisco	3	16	2.15
San Francisco	3½	16	2.26
San Francisco	4	16	2.57

CURBING—Prices per linear foot are as follows:

New York	5 x 16	$0.45
	5 x 20	.50
Chicago	6 x 18	.60
St. Louis	5x16 square edge	.72
San Francisco	6 x 16	.65
	6 x 20	.80

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel 1½ In. Dec. 1. 1917	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Dec. 1. 1917	Gravel ¾ In. One Yr. Ago	Sand Dec. 1. 1917	Sand One Yr. Ago
New York	$1.40	$1.00	$1.50	$1.10	$0.50	$0.50
Los Angeles	.75*	....	.75*	....	.55*	....
Chicago	1.40	1.00	1.40	1.00	1.40	1.00
St. Louis	1.11	.70	1.11	.70	1.11	.60
New Orleans	1.95	....	1.95	....	1.95	....
Dallas	1.50	1.00	1.50	1.00	1.35	.75
Denver	**1.45**	....	**1.45**	....	**1.09**	....
San Francisco	**1.06**	1.00	1.00	1.00	**1.06**	1.00
Seattle	.80	....	.80	....	.80	....
Boston	1.50	....	1.60	....	**.90**	....
St. Paul	1.10	....	1.40	....	.50	....

*Price per ton.

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. Dec. 1, 1917	1½ In. One Year Ago	¾ In. Dec. 1, 1917	¾ In. One Year Ago
New York	$1.15–1.25	$1.00–1.10	$1.25–1.35	$1.10–1.25
Boston	**1.50**	....	**1.50**	....
Chicago	1.40	1.00	1.40	1.00
St. Louis	**1.45**	1.00	**1.45**	1.00
Dallas	*1.39*	....	....	....
San Francisco	**1.06**	1.00	1.00	1.00
St. Paul	1.00	....	1.10	....
Seattle	1.10	....	1.10	....
Denver	**1.45**	....	**1.45**	....
Los Angeles	.95	....	.95	....

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$16.50	....	$2.10	....
Chicago	15.00	12.00	....	....
St. Louis	13.00	....	1.50	....
San Francisco	16.50	....	....	$1.65

ROSENDALE NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., including bags:

New York $1.15

30c. allowed for bags.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags, to contractors:

	Dec. 1, 1917	One Month Ago	One Year Ago
New York	$2.22	$2.22	$1.87
Jersey City	2.16	2.16	1.80
Boston	2.37	2.37	2.02
Chicago	2.21	2.21	1.96
Pittsburgh	2.31	2.31	1.96
Cleveland	2.44	2.44	2.09
Detroit	2.40	2.40	2.05
Indianapolis	2.38	2.38	2.09
Toledo	2.40	2.40	2.09
Milwaukee	2.33	2.33	2.08
Minneapolis	2.48	2.48	2.23
Duluth	2.51	2.51	2.21
Peoria	2.33	2.33	2.08
Cedar Rapids	2.48	2.48	2.19
Davenport	2.40	2.40	2.14
St. Louis	2.45	2.45	1.95
Denver	*3.10*	3.20	...
San Francisco	2.30	2.30	2.30
Los Angeles	**2.40**	2.30	...
Dallas	**2.60**	2.40	...
Boston	*2.27*	2.37	...
New Orleans	3.00	...	...
St. Paul	**2.83**	2.58	...
Seattle	**2.75**	2.65	...

TRIANGLE MESH—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.96	$0.99	$1.01	$0.96	$1.13	$1.27
049	0.049	1.22	1.27	1.28	1.22	1.43	1.63
068	0.068	1.52	1.57	1.60	1.52	1.79	2.04
093	0.093	1.96	2.03	2.06	1.96	2.41	2.62
126	0.126	2.48	2.56	2.60	2.48	2.92	2.96
153	0.153	2.96	3.07	3.11	2.96	3.48	3.32
180	0.180	3.39	3.50	3.56	3.39	3.99	....
245	0.245	4.48	4.64	4.70	4.48	5.27	5.65
287	0.287	5.18	5.36	5.41	5.18	6.10	6.94
336	0.336	6.00	6.21	6.30	6.00	7.06	....
395	0.395	6.96	7.17	7.30	6.96	8.19	....
036	0.036	.74	.76	.78	.74	.87	....
053	0.053	1.04	1.08	1.09	1.04	1.23	....
072	0.072	1.35	1.39	1.41	1.35	1.59	....
097	0.097	1.74	1.80	1.83	1.74	2.05	....
049	0.049	1.04	1.14	1.09	1.04	1.23	1.97
067	0.067	1.35	1.39	1.42	1.35	1.59	....
089	0.089	1.74	1.80	1.83	1.74	2.05	....

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized is about 10% higher.

EXPANDED METAL LATH—Prices per 100 yd. for painted are as follows:

Carload

Gage	Weight	New York Dec. 1, 1917	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$31.00	$18.00	$31.00	$34.00	$29.00	$32.00
26	250	32.05	19.00	32.00	35.00	30.25	....
25	300	33.15	20.00	33.00	....	....	35.00
24	340	34.25	21.00	34.00	37.00	33.00	36.00
22	450	36.45	24.00	36.00	....	....	....

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING—The folowing quotations are per 100 lb., for plain round or square bars:

ROLLED FROM BILLETS

In.	Mill Shipment	Warehouse New York Dec. 1, 1917	Warehouse New York One Year Ago	Warehouse St. Louis	Warehouse Chicago	Warehouse San Francisco	Warehouse Dallas
¾ and larger	*$2.90*	*$4.09½*	$5.10	$4.17	*$4.10*	*$6.00*	$4.75
⅝	*2.95*	*4.14½*	5.15	4.22	*4.15*	*6.05*	4.80
½	*3.00*	*4.19½*	5.20	4.27	*4.20*	*6.10*	4.85
⅜	*3.15*	*4.34½*	5.35	4.42	*4.35*	*6.25*	5.00
¼	*3.60*	*4.59½*	5.60	4.67	*4.60*	*6.50*	6.00

Twisted bars cut to length take extra of 27½c. per 100 lb. Extra on deformed bars, uncut, 7½c.

ROLLED FROM RAILS

	Chicago	Dallas		Chicago	Dallas
¾ in. and larger	*$4.10*	$4.75	⅜	*$4.35*	$5.00
⅝	*4.15*	4.80	¼	*4.60*	6.00
½	*4.20*	4.85			

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common Dec. 1, 1917	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$8.25	$8.25	$9.50	$33.00	$40.00
Chicago	8.00	8.00	6.00	17.00	25.00
St. Louis, selected	10.00	10.00	10.00	18.00	....
St. Louis, salmon	8.00	8.00	7.00	....	....
Denver	8.00	8.00	....	....	....
San Francisco	10.00	10.00	10.00	....	....
Dallas	**9.50**	8.60	....	22.00	22.50
Boston	13.25	13.25	....	....	25.00
St. Paul	8.70	8.70	....	....	27.00
Seattle	9.00	9.00	....	....	28.75
Los Angeles	**8.00**	7.50	....	....	....
New Orleans	10.00	....	....	....	10.50

HOLLOW TILE—Hollow building tile price per block in cents:

	New York Dec. 1, 1917	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4x12x12	$0.095	$0.075	$0.079	$0.054	$0.0825	$0.075
6x12x12	.133	.104	.119	.066	.11	.105
8x12x12	.1615	.1266	.137	.09	.1275	.14
10x12x12	.190	.149	.158	.15	.20	.16
12x12x12	.2375	.1875	.205	.18	.22	.21

Above prices are for carload lots or more.

	4x12x12	8x12x12	12x12x12
Boston	*$0.08*	*$0.15*	*$0.20*
St. Paul	.055	.138	.153
Denver	.11	.20	.30
Los Angeles	**.0668**	**.12**	**.20**
Seattle	.06	.10	.16

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Pittsburgh	New York Dec. 1, 1917	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in.	$3.00	*$4.195*	$3.85	*$4.27*	*$4.20*	$7.75	$6.00
Channels, 3 to 15 in.	3.00	*4.195*	3.25	*4.27*	*4.20*	7.75	6.00
Angles, 3 to 6 in., ¼ in. thick	3.00	*4.195*	3.25	*4.27*	*4.20*	7.75	6.00
Tees, 3 in. and larger	3.00	*4.195*	3.40	*4.27*	*4.25*	7.75	6.00
Plates	3.25	*4.445*	4.00	*4.52*	*4.45*	7.75	9.00

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill Pittsburgh	Warehouse New York Dec. 1, 1917	Warehouse New York One Year Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse San Francisco	Warehouse Dallas
¾ in. and larger	$5.25	$7.00	$5.25	$5.50	$5.55	$7.15	$8.40
CONE HEAD BOILER							
¾ in. and larger	5.35	7.10	5.35	5.60	5.65	7.25	8.50
⅝ and $\frac{11}{16}$	5.50	7.25	5.50	5.75	5.80	7.40	8.65
½ and $\frac{9}{16}$	5.85	7.60	5.85	6.10	6.15	7.75	9.00

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.c.l.	2-Ply c.l.	2-Ply l.c.l.	3-Ply c.l.	3-Ply l.c.l.
No. 1 grade	$1.15	$1.40	$1.45	$1.60	$1.75	$1.90
No. 2 grade	1.10	1.25	1.25	1.40	1.50	1.65

Asbestos asphalt-saturated felt (14 lb. per square) costs $6.50 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $1.85 per roll in carload lots and $2.10 for smaller quantities.

Shingles, red and green slate finish, cost $4.75 per square in carloads, $5 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York or Chicago:

	Carload Lots	Less Than Carload Lots
Tar felt (14 lb. per square of 100 sq.ft.)	$61.00	$62.00
Tar pitch (in 400-lb. bbl.)	15.00	16.50
Asphalt pitch (in barrels)	29.00	30.50
Asphalt felt	60.00	62.00

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

Blue Annealed	Large Lots, Pittsburgh	St. Louis	Chicago	San Francisco	New York Dec. 1, 1917	New York One Yr. Ago
No. 10	*4.25*	*5.42*	*5.45*	*8.25*	*5.445*	4.25
No. 12	*4.30*	*5.47*	*5.50*	*8.30*	*5.495*	4.30
No. 14	*4.35*	*5.52*	*5.55*	*8.35*	*5.545*	4.35
Black						
Nos. 18 and 20	*4.80*	*6.32*	*6.25*	*8.30*	*6.245*	3.80
Nos. 22 and 24	*4.85*	*6.37*	*6.30*	*8.35*	*6.295*	3.85
No. 26	*4.90*	*6.42*	*6.35*	*8.40*	*6.435*	3.90
No. 28	*5.00*	*6.52*	*6.45*	*8.50*	*6.445*	4.00
Galvanized						
No. 10	*5.25*	*6.97*	*6.80*	....	*6.695*	....
No. 12	*5.35*	*6.97*	*6.80*	*8.60*	*6.795*	4.50
No. 14	*5.35*	*6.97*	*6.80*	*8.60*	*6.795*	4.50
Nos. 18 and 20	*5.65*	*7.17*	*7.10*	*8.90*	*7.095*	4.90
Nos. 22 and 24	*5.80*	*7.32*	*7.25*	*9.05*	*7.245*	5.30
No. 26	*5.95*	*7.47*	*7.40*	*9.20*	*7.395*	5.45
No. 28	*6.25*	*7.77*	*7.70*	*9.50*	*7.695*	5.75

LINSEED OIL—These prices are per gallon:

	New York Dec. 1, 1917	New York One Year Ago	Cleveland Dec. 1, 1917	Cleveland One Year Ago	Chicago Dec. 1, 1917	Chicago One Year Ago
Raw in barrels	**$1.22**	$1.01	**$1.25**	$1.05	**$1.22**	$0.96
5-gal. cans	**1.32**	1.11	**1.40**	1.15	**1.32**	1.06

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red Dec. 1, 1917 Dry	Red Dec. 1, 1917 In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White Dec. 1, 1917 Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	12.25	12.50	10.50	11.00	12.00	10.50
25- and 50-lb. kegs	12.50	12.75	10.75	11.25	12.25	10.75
12½-lb. keg	12.75	13.00	11.00	11.50	12.50	11.00
1- to 5-lb. cans	14.25	14.50	12.50	12.50	14.50	12.50

LUMBER—Price per M in carload lots:

Rough Douglas Fir, No. 1 Common—More than carload lots in San Francisco:

Size in Inches	15 Ft. and Under	16 to 24 Ft.	25 to 32 Ft.
3 and 4x4	$24.00	$25.50	....
3 and 4x6 and 8	24.00	24.50	$25.50
6x6 and 8x8	24.50	25.50	25.50
3 and 4x10	24.00	25.50	26.50
6 and 8x10	25.00	26.00	27.00
3 and 4x12	24.00	25.50	26.50
6 and 8x12	25.50	26.50	26.50
10 and 12x12	25.00	25.00	27.00
3 and 4x14	25.00	27.00	28.00
6 and 8x14	26.50	27.50	27.50
7 and 9x14	27.50	28.50	28.50
10 and 12x14	26.00	26.00	28.00

Square Edge and Sound Green

	Southern Pine, New York, 20 Ft. and Under	Southern Pine, New York, 22-24 Ft.	Southern Pine, Chicago, 20 Ft. and Under	Southern Pine, Chicago, 22-24 Ft.	Yellow Pine, St. Louis, 20 Ft. and Under	Yellow Pine, St. Louis, 22-24 Ft.
3 x 4	$33.75	**$34.00**	$31.75	*$32.75*	$28.75	*$29.75*
3 x 10	**36.75**	**37.00**	**34.75**	*35.75*	*31.75*	*32.75*
3 x 12	**41.75**	**42.00**	**39.75**	**40.75**	*36.75*	*37.75*
3 x 14	**42.75**	*45.00*	**41.75**	*43.75*	*38.75*	*40.75*
3 x 16	**45.75**	*47.00*	43.75	45.75	40.75	42.75
3 x 18	**48.75**	*51.00*	46.75	*49.75*	43.75	46.75
4 x 20	**51.75**	*54.00*	49.75	*52.75*	46.75	*49.75*

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Prices from Lumberman's Bureau.

	8 x 8-In. x 20 Ft. and Under Y.P.	Fir	Hemlock	Spruce	12 x 12-In., 20 Ft. and Under Y.P.	Fir
Boston	....	....	....	$40.00	....	....
Seattle	**$23.00**	**$23.00**	**$23.00**	**23.00**	**$23.00**	**$23.00**
Los Angeles	....	30.00	30.00	....	....	....
New Orleans	26.00	....	....	....	38.00	....
St. Paul	....	38.00	**38.00**	38.00	....	**51.00**
Denver	....	**32.00**	....	**28.50**	....	**31.00**
San Francisco	....	24.00	24.00	....	....	24.00

	1-In. Rough 10 In. x 16 Ft. and Under Y.P.	Fir	Hemlock	2-In. T. and G. 10 In. x 16 Ft. Y.P.	Fir
Seattle	**$23.00**	**$23.00**	**$23.00**	**$23.00**	**$23.00**
New Orleans	26.00	....	....	24.00	....
San Francisco	....	24.00	24.00	....	24.00
St. Paul	....	**53.00**	34.00	**61.00**	37.50
Denver	....	30.00	30.00	....	30.00

Yellow Pine—Dallas. Price per M:

2x4 to 2x12—12, 14 and 16	$32.50
2x4 to 2x12—10, 18 and 20	35.00
2x4 to 2x12—22 and 24	37.50
4x4, 4x6, 6x6, 8x8 and 3x8	**40.00**
8x10, 10x10 and 3x10	**42.50**
12x12 and 3x12	**42.50**

NAILS—The following quotations are per keg from warehouse:

	Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	**$3.50**	**$4.30**	*$4.25*	**$4.70**	$4.50
Cut	....	**5.25**	*4.40*	6.15	...

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	21.5	New Orleans	30.7
Buffalo	11.6	New York	19.5
Chicago	18.9	Pacific Coast (all rail)	75.0
Cincinnati	15.8	Philadelphia	18.5
Cleveland	10.5	St. Louis	23.6
Denver	68.6	St. Paul	32.9
Kansas City	43.6		

Note—Add 3% transportation tax.

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York	Chicago
Sulphate of alumina (iron free), in 400-lb. barrel	$0.045	....
Hypochlorite of lime (bleaching powder), in 700-lb. drums	03	....
Soda ash, in 400-lb. bbl.	05	.03¾ to 4
Liquid chlorine, in 100-lb. cylinders	175	.16 to .18

Lime is quoted separately.

CONTRACTORS' MISCELLANEOUS SUPPLIES

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Dec. 1, 1917	One Month Ago	One Year Ago
$4.00 to $5.00	$4.00 to $5.00	$3.00

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York	St. Louis	Chicago	San Francisco
Galvanized	10—2½%	10—2½%	10—2½%	**+10%**
Bright	20—2½%	20—2½%	20—2½%	15%

Note—Change in price imminent.

MANILA ROPE—For rope smaller than ⅝-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅝-in., 8 ft.; ¾-in., 6; ⅞-in., 4½; 1-in., 3½; 1⅛-in., 2 ft. 10 in.; 1¼-in., 2 ft. 4 in. Following is price per pound for ⅝-in. and larger, in 1200-ft. coils:

Boston	*$0.35*	New Orleans	$0.33
New York	**.35**	Los Angeles	.34
Chicago	**.37½**	Seattle	.33½
St. Paul	.34	Denver	.35½

EXPLOSIVES—Price per pound in small lots at cities named:

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	Gelatin 80%	Black Powder
New York	......	$0.27½	$0.34½	......	$2.50*
Boston	......	......	.36¼	$0.43¾	....
New Orleans	......	.27½	.34½	......	....
Los Angeles	$0.21	.29	.39	......	....
Seattle	.18½	.24¾	.31¾	.41¾	....
Chicago	.19¾	.22¾	.33	.43	2.45*
St. Paul	.20	.26¼	.33¼	......	2.55*
St. Louis	.16½	.20½	.29½	.39½	2.15*
Denver	.19	.25¼	.32¼	.42¼	....
Dallas	.25	.29	.39	.49	....

*Keg.

POLES—Price of Western red cedar poles is as follows:

	New York Dec. 1, 1917	New York One Year Ago	Chicago	St. Louis	Denver
6 in. by 30 ft.	$5.59	$4.77	$4.94	$4.94	$4.32
7 in. by 30 ft.	7.40	5.90	6.60	6.60	5.80
7 in. by 35 ft.	10.70	....	9.60	9.60	8.55
8 in. by 35 ft.	12.20	9.75	10.90	10.90	9.65
7 in. by 40 ft.	12.35	9.95	11.00	11.00	9.75
*8 in. by 45 ft.	18.20	14.45	16.20	16.20	14.30
*8 in. by 50 ft.	21.85	16.85	19.45	19.45	17.15

*10c. higher freight rates on account of double loads.

For plain pine poles, delivered New York, the price is as follows:

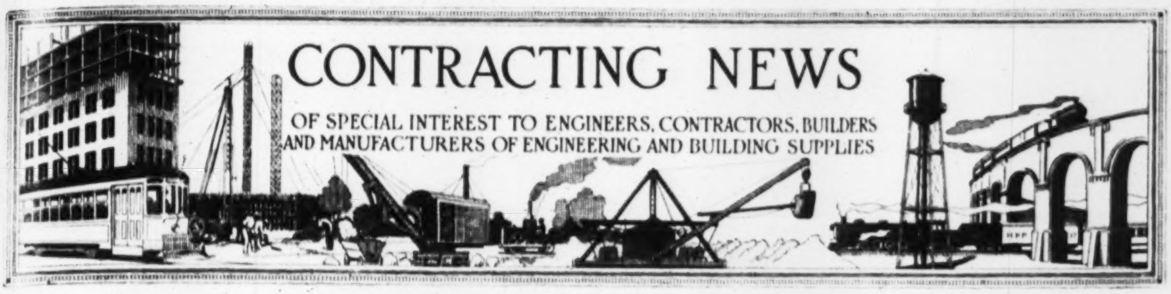
10-in. butts, 5-in. tops, length 20-30 ft.	$5.00
12-in. butts, 6-in. tops, length 30-40 ft.	7.50
12-in. butts, 6-in. tops, length 41-50 ft.	8.50
14-in. butts, 6-in. tops, length 51-60 ft.	16.00
14-in. butts, 6-in. tops, length 61-71 ft.	17.50

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York Dec. 1, 1917	New York One Month Ago
Heavy melting steel scrap	**$25.00 to 26.00**	$23.50 to 24.50
No. 1 railroad wrought	32.00 to 33.00	32.00 to 33.00
Stove plate	**20.00 to 20.50**	18.00 to 19.00
No. 1 machinery cast	26.00 to 27.00	26.00 to 27.00
Machine shop turnings	**15.00 to 16.00**	14.00 to 15.00
Cast borings	**17.00 to 18.00**	16.00 to 17.00
Railroad malleable cast	27.00 to 28.00	27.00 to 28.00

	Chicago Dec. 1, 1917	Chicago One Month Ago
No. 1 railroad wrought	*$25.00 to 26.00*	**$28.50 to 29.00**
Stove plate	**16.50 to 17.00**	15.50 to 16.50
No. 1 machinery cast	20.50 to 21.00	20.00 to 21.00
Cast borings	**16.50**	14.25 to 15.25
Machine shop turnings	**16.50**	15.00 to 15.50
Railroad malleable cast	**26.00 to 26.50**	24.00 to 25.00

	St. Louis Price Delivered Dec. 1, 1917	St. Louis Price Delivered One Month Ago
No. 1 railroad wrought	**$30.50 to 31.00**	$29.00 to 30.00
Stove plate	**16.50 to 17.00**	10.00 to 11.00
No. 1 machinery cast	19.00 to 20.50	19.00 to 20.00
Machine shop turnings	**16.75 to 17.25**	14.00 to 15.00
Cast borings	**16.50 to 17.00**	12.00 to 13.00
Railroad malleable cast	**25.50 to 26.00**	24.00 to 25.00



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated by heavy type; declines by *italics*.

PIG IRON

Below are the present quotations with a comparison of a month and a year ago

	Dec. 1, 1917	One Month Ago	One Year Ago
CINCINNATI			
No. 2 Southern foundry....	**$35.90**	$33.00	$24.46
No. 2 Northern basic.....	34.26	....	28.26
NEW YORK			
No. 2X Northern foundry..	34.25	34.25	29.00
No. 2 plain Northern foundry	33.75	33.75	28.50
No. 2 Southern foundry†...	**38.75 to 39.25‡**	37.25	28.00
BIRMINGHAM			
No. 2 Southern foundry....	33.00	33.00	22.00
CHICAGO			
No. 2 Northern foundry....	33.00	33.00	27.00
No. 2 Southern foundry....	37.00	37.00	....
PITTSBURGH			
Bessemer iron*	**37.25**	36.30	34.45
Basic iron*	33.00	33.00	30.00

*These prices include the freight charge from the valley to the Pittsburgh district. †Delivered Tidewater, New York. ‡Rail and water.

RAILWAY SUPPLIES

STEEL RAILS—The following quotations are per 100 lb. f.o.b Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh		Chicago	
	Dec. 1, 1917	One Year Ago	Dec. 1, 1917	One Year Ago
Standard bessemer rails....	$38.00	$38.00	$38.00	$38.00
Standard openhearth rails..	40.00	40.00	40.00	40.00
Light rails, 8 to 10 lb......	*43.50*	50.00	*43.50*	47.00
Light rails, 12 to 14 lb.....	*39.00*	49.00	*39.00*	46.00
Light rails, 25 to 45 lb.....	*30.00*	47.00	*30.00*	44.00

Note—Reported that rerolled rails are higher than new rails rolled from billets.

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh				
	Dec. 1, 1917	One Year Ago	Chicago	St. Louis	San Francisco
Standard railroad spikes, $\frac{9}{16}$-in. and larger......	**$5.00 to 5.50**	$2.65	$5.00	$6.45 base	$7.25
Track bolts, square nuts..	**7.00 to 8.50**	3.25	6.25	Premium	8.80
Standard section angle bars	*3.50 to 4.00*	2.00	4.50	Premium	4.65

RAILWAY TIES—For fair-sized orders, the following prices per tie hold:

	Material	7 In. x 9 in. by 8 Ft. 6 In.	6 In. x 8 in. by 8 Ft.
New York	Yellow Pine	$1.30	**$1.06 to 1.11**
St. Louis	White Oak	1.00	.75
Chicago	Plain	.97	.82
Chicago.......	Creosoted	1.30	1.15
San Francisco..	Green	**1.13**	**.80**
San Francisco..	Creosoted	**2.02**	*1.43*

PIPE

PIPE—The following discounts are for carload lots f.o.b. Pittsburgh, basing car of Nov. 5, by Government, for steel, iron still being of May 1:

Steel			Iron		
Inches	Black	Galvanized	Inches	Black	Galvanized
		BUTT WELD			
¾ to 3.......	*51%*	*37½%*	¾ to 1½......	33%	17%
		LAP WELD			
2	*44%*	*31½%*	1¼	18%	3%
2½ to 6......	*47%*	*34½%*	1½	25%	11%
7 to 12........	*44%*	*30½%*	2	26%	12%
13 and 14......	*34½%*	....	2½ to 6......	28%	15%
15	*32%*	....	7 to 12........	25%	12%
		BUTT WELD, EXTRA STRONG PLAIN ENDS			
¾ to 1½......	*49%*	*36½%*	¾ to 1½......	33%	18%
2 to 3.........	*50%*	*37½%*			
		LAP WELD, EXTRA STRONG PLAIN ENDS			
2	*42%*	*30½%*	1¼	19%	4%
2½ to 4......	*45%*	*33½%*	1½	25%	11%
4½ to 6......	*44%*	*32½%*	2	27%	14%
7 to 8.........	*40%*	*26½%*	2½ to 4......	29%	17%
9 to 12........	*35%*	*21½%*	4½ to 6......	28%	16%
			7 to 8........	20%	8%
			9 to 12........	15%	3%

From warehouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded............	38%	*42.8%*	*40.1%*
3½ to 6 in. lap welded............	18%	*38.8%*	*36.1%*

	Galvanized		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded............	22%	*27.8%*	*27.1%*
3½ to 6 in. lap welded............	List	*18.8%*	*22.1%*

Malleable fittings, Class B and C, from New York stock sell at 5 and 5% from list prices. Cast iron, standard sizes, 34 and 5%.

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York						
	Dec. 1, 1917	1 Month Ago	One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4 in.	$59.50	$59.50	$34.50	**$58.35**	**$57.00**	**$66.40**	**$62.00**
6 in. and over	56.50	56.50	31.50	**55.35**	**54.00**	**63.40**	**59.00**

Gas pipe and 16-ft. lengths are $1 per ton extra.
Note—Advances due to Government price-fixing.

CLAY DRAIN TILE—The following prices are per 1000 lin.ft.

	New York					
Size, In.	Dec. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$35.00	$23.00	$18.40	$15.00	$26.25	**$24.00**
4	51.00	32.45	20.70	18.00	34.75	**36.00**
5	65.00	45.00	28.75	23.00	48.75	**48.00**
6	90.00	56.55	40.25	27.00	67.50	**64.00**
8	130.00	98.50	74.75	55.00	....	**120.00**

SEWER PIPE—The following prices are in cents per foot for carload lots:

	New York					
Size, In.	Dec. 1, 1917	One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	$0.093	$0.0725	....	$0.09	$0.075	$0.1032
4	.093	.0725	....	.10	.10	.1032
5	.1395	.12	....	.135	.12	.1548
6	.1395	.12	$0.12	.15	.15	.1548
8	.217	.165	.165	.21	.225	.215
10	.3255	.24	.23	.315	.30	.301
12	.4185	.30	.33	.405	.40	.387
15	.558	.405	.50	.54	....	.559
18	.775	.57	.75	.75	.75	.731
20	.93	.675	.90	.90	.962	.86
22	1.24	.90	1.13	1.20	....	1.118
24	1.395	.975	1.28	1.35	**1.375**	1.29
27	2.08	1.665	1.30	....	....	1.935
30	2.304	2.075	1.70	....	....	2.365
33	3.06	2.625	2.25	....	....	3.05
36	3.485	2.94	2.50	....	....	3.44

	Boston	St. Paul	Denver	Los Angeles	Seattle
3	$0.099	**$0.09**	$0.09	**$0.0675**	**$0.0825**
5	.1485	**.135**	.18*	**.1125**	......
8	.231	**.1875**	.25	**.2025**	**.2475**
12	.4455	**.3375**	.40	**.36**	**.48**
24	1.485	**1.44**	1.35	**1.25**	**1.75**
36	3.69	**3.00**	3.00*	.....	.....

*Denver: 6 in. and 30-in.

ROAD AND PAVING MATERIALS

ROAD OILS—Following are prices in tank cars 8000 gal. minimum f.o.b. places named:

St. Louis, 45-50% asphalt..........................	$0.06½
Chicago, 15-20% asphalt..........................	.06½
Chicago, 100% dust layer..........................	.08½
Dallas 40-50% asphalt..........................	.07
Dallas, 69-70% asphalt..........................	.08
Dallas, 75-90% asphalt..........................	.09
San Francisco, 75-95% asphalt..........................	1.90*

*Per barrel of 42 bulk gallons.

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York...............	Texaco	$30.00	....
New York	Mexican	28.00	$20.00
Chicago	Mexican	25.00	21.00
St. Louis...............	Stanolind	21.00	17.00
San Francisco	California	16.50	13.50
Dallas	Texaco and Mexican......	25.00	23.00
Seattle...............	....	**19.00**	....
Denver...............	Trinidad	31.00	....
Denver	California	23.00	....
St. Paul...............	Trinidad	**26.50**	....

PAVING STONE—

New York	Manhattan	$2.50	sq.yd.
	Other boroughs	2.25	sq.yd.
New York..........	5-in. granite	2.55	sq.yd.
Chicago	About 4x8x4 dressed..........	2.25	sq.yd.
	About 4x8x4 common..........	1.80	sq.yd.
San Francisco	Basalt block 4x7x8	57.75	per M
St. Paul............	Sandstone	1.65	sq.ft.
Boston	5-in. granite	2.55	sq.yd.

FLAGGING—

		Dec. 1, 1917	
New York	Bronx	$0.17	sq.ft.
	Manhattan	.18	sq.ft.
	Queens, 5 ft. square..........	.19	sq.ft.
	5x20-in. cross-walk	.30	sq.ft.
Chicago	18 in. wide	.75	lin.ft.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$2.00
New York	4	16	2.25
Chicago	4	16	1.85
Chicago	3½	16	1.70
Chicago	City specifications		2.10
St. Louis	3½	16	1.81
St. Louis	4	16	2.04
Seattle	4	16	*1.53*
St. Paul	Minneapolis specifications		2.00
New Orleans	3½	16	2.30
New Orleans	4	16	2.60
San Francisco	3	16	2.15
San Francisco	3½	16	2.26
San Francisco	4	16	2.57

CURBING—Prices per linear foot are as follows:

New York	5 x 16	$0.45
	5 x 20	.50
Chicago	6 x 18	.60
St. Louis	5x16 square edge	.72
San Francisco	6 x 16	*.65*
	6 x 20	.80

CONSTRUCTION MATERIALS

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Gravel 1½ In. Dec. 1, 1917	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. Dec. 1, 1917	Gravel ¾ In. One Yr. Ago	Sand Dec. 1, 1917	Sand One Yr. Ago
New York	$1.40	$1.00	$1.50	$1.10	$0.50	$0.50
Los Angeles	.75*	....	.75*	....	.55*	....
Chicago	1.40	1.00	1.40	1.00	1.40	1.00
St. Louis	1.11	.70	1.11	.70	1.11	.60
New Orleans	1.95	....	1.95	....	1.95	....
Dallas	1.50	1.00	1.50	1.00	1.35	.75
Denver	1.45	....	1.45	....	1.00	....
San Francisco	1.06	1.00	1.00	1.00	1.06	1.00
Seattle	.80	....	.80	....	.80	....
Boston	1.50	....	1.60	....	.90	....
St. Paul	1.10	....	1.40	....	.50	....

*Price per ton.

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. Dec. 1, 1917	1½ In. One Year Ago	¾ In. Dec. 1, 1917	¾ In. One Year Ago
New York	$1.15–1.25	$1.00–1.10	$1.25–1.35	$1.10–1.25
Boston	1.50	....	1.50	....
Chicago	1.40	1.00	1.40	1.00
St. Louis	1.45	1.00	1.45	1.00
Dallas	*1.39*	....	....	....
San Francisco	1.06	1.00	1.00	1.00
St. Paul	1.00	....	1.10	....
Seattle	1.10	....	1.10	....
Denver	1.45	....	1.45	....
Los Angeles	.95	....	*.95*	....

LIME—Warehouse prices:

	Hydrated per Ton Finished	Hydrated per Ton Common	Lump per 300-Lb. Barrel Finished	Lump per 300-Lb. Barrel Common
New York	$16.50	....	$2.10	....
Chicago	15.00	12.00	....	....
St. Louis	13.00	....	1.50	....
San Francisco	16.50	....	....	$1.65

ROSENDALE NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., including bags:

New York	$1.15

30c. allowed for bags.

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags, to contractors:

	Dec. 1, 1917	One Month Ago	One Year Ago
New York	$2.22	$2.22	$1.87
Jersey City	2.16	2.16	1.80
Boston	2.37	2.37	2.02
Chicago	2.21	2.21	1.96
Pittsburgh	2.31	2.31	1.96
Cleveland	2.44	2.44	2.09
Detroit	2.40	2.40	2.05
Indianapolis	2.38	2.38	2.09
Toledo	2.40	2.40	2.09
Milwaukee	2.33	2.33	2.08
Minneapolis	2.48	2.48	2.23
Duluth	2.51	2.51	2.21
Peoria	2.33	2.33	2.08
Cedar Rapids	2.48	2.48	2.19
Davenport	2.40	2.40	2.14
St. Louis	2.45	2.45	1.95
Denver	*3.10*	3.20	...
San Francisco	2.30	2.30	2.30
Los Angeles	2.40	2.30	...
Dallas	2.60	2.40	...
Boston	*2.27*	2.37	...
New Orleans	3.00	...	...
St. Paul	2.83	2.58	...
Seattle	2.75	2.65	...

TRIANGLE MESH—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.96	$0.99	$1.01	$0.96	$1.13	$1.27
049	0.049	1.22	1.27	1.28	1.22	1.43	1.63
068	0.068	1.52	1.57	1.60	1.52	1.79	2.04
093	0.093	1.96	2.03	2.06	1.96	2.41	2.62
126	0.126	2.48	2.56	2.60	2.48	2.92	2.96
153	0.153	2.96	3.07	3.11	2.96	3.48	3.32
180	0.180	3.39	3.50	3.56	3.39	3.99	....
245	0.245	4.48	4.64	4.70	4.48	5.27	5.65
287	0.287	5.18	5.36	5.44	5.18	6.10	6.94
336	0.336	6.00	6.21	6.30	6.00	7.06	....
395	0.395	6.96	7.17	7.30	6.96	8.19	....
036	0.036	.74	.76	.78	.74	.87	....
053	0.053	1.04	1.08	1.09	1.04	1.23	....
072	0.072	1.35	1.39	1.41	1.35	1.59	
097	0.097	1.74	1.80	1.83	1.74	2.05	
049	0.049	1.04	1.14	1.09	1.04	1.23	1.97
067	0.067	1.35	1.39	1.42	1.35	1.59	
089	0.089	1.74	1.80	1.83	1.74	2.05	

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.

Galvanized is about 10% higher.

EXPANDED METAL LATH—Prices per 100 yd. for painted are as follows:

Carload

Gage	Weight	New York Dec. 1, 1917	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
27	233	$31.00	$18.00	$31.00	$34.00	$29.00	[illegible]
26	250	32.05	19.00	32.00	35.00	30.25	
25	300	33.15	20.00	33.00	....	....	35.00
24	340	34.25	21.00	34.00	37.00	33.00	36.00
22	450	36.45	24.00	36.00	....	....	

About 10% additional for smaller quantities.

BARS, CONCRETE REINFORCING—The folowing quotations are per 100 lb., for plain round or square bars:

ROLLED FROM BILLETS

In.	Mill Shipment	Warehouse New York Dec. 1, 1917	Warehouse New York One Year Ago	Warehouse St. Louis	Warehouse Chicago	Warehouse San Francisco	Warehouse Dallas
¾ and larger	*$2.90*	*$4.09½*	$5.10	$4.17	*$4.10*	*$6.00*	$4.75
⅝	*2.95*	*4.14½*	5.15	4.22	*4.15*	*6.05*	4.80
½	*3.00*	*4.19½*	5.20	4.27	*4.20*	*6.10*	4.85
⅜	*3.15*	*4.34½*	5.35	4.42	*4.35*	*6.25*	5.00
¼	*3.60*	*4.59½*	5.60	4.67	*4.60*	*6.50*	6.00

Twisted bars cut to length take extra of 27½c. per 100 lb. Extra on deformed bars, uncut, 7½c.

ROLLED FROM RAILS

	Chicago	Dallas		Chicago	Dallas
¾ in. and larger	*$4.10*	$4.75	⅜	*$4.35*	$5.00
⅝	*4.15*	4.80	¼	*4.60*	6.00
½	*4.20*	4.85			

BRICK—To contractors the price per 1000 in cargo or carload lots is as follows:

	Common Dec. 1, 1917	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$8.25	$8.25	$9.50	$33.00	$40.00
Chicago	8.00	8.00	6.00	17.00	25.00
St. Louis, selected	10.00	10.00	10.00	18.00	....
St. Louis, salmon	8.00	8.00	7.00	....	....
Denver	8.00	8.00	....	....	....
San Francisco	10.00	10.00	10.00	....	....
Dallas	9.50	8.60	....	22.00	22.50
Boston	13.25	13.25	....	....	25.00
St. Paul	8.70	8.70	....	....	27.00
Seattle	9.00	9.00	....	....	28.75
Los Angeles	8.00	7.50	....	....	....
New Orleans	10.00	....	....	....	10.50

HOLLOW TILE—Hollow building tile price per block in cents:

	New York Dec. 1, 1917	New York One Year Ago	Chicago	St. Louis	San Francisco	Dallas
4x12x12	$0.095	$0.075	$0.079	$0.054	$0.0825	$0.075
6x12x12	.133	.104	.119	.066	.11	.105
8x12x12	.1615	.1266	.137	.09	.1275	.14
10x12x12	.190	.149	.158	.15	.20	.16
12x12x12	.2375	.1875	.205	.18	.22	.21

Above prices are for carload lots o. more.

	4x12x12	8x12x12	12x12x12
Boston	*$0.08*	*$0.15*	*$0.20*
St. Paul	.055	.138	.153
Denver	.11	.20	.30
Los Angeles	.0668	.12	.20
Seattle	.06	.10	.16

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Pittsburgh	New York Dec. 1, 1917	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco	Dallas
Beams, 3 to 15 in.	$3.00	*$4.195*	$3.85	*$4.27*	*$4.20*	$7.75	$6.00
Channels, 3 to 15 in.	3.00	*4.195*	3.25	*4.27*	*4.20*	7.75	6.00
Angles, 3 to 6 in., ¼ in. thick	3.00	*4.195*	3.25	*4.27*	*4.20*	7.75	6.00
Tees, 3 in. and larger	3.00	*4.195*	3.40	*4.27*	*4.25*	7.75	6.00
Plates	3.25	*4.445*	4.00	*4.52*	*4.45*	7.75	9.00

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill. Pittsburgh	Warehouse New York Dec. 1, 1917	Warehouse New York One Year Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse San Francisco	Warehouse Dallas
¾ in. and larger	$5.25	$7.00	$5.25	$5.50	$5.55	$7.15	$8.40

CONE HEAD BOILER

	Mill. Pittsburgh	Warehouse New York Dec. 1, 1917	Warehouse New York One Year Ago	Warehouse Chicago	Warehouse St. Louis	Warehouse San Francisco	Warehouse Dallas
¾ in. and larger	5.35	7.10	5.35	5.60	5.65	7.25	8.50
⅝ and 11/16	5.50	7.25	5.50	5.75	5.80	7.40	8.65
½ and 9/16	5.85	7.60	5.85	6.10	6.15	7.75	9.00

Lengths shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York, St. Louis, Chicago and San Francisco:

	1-Ply c.l.	1-Ply l.c.l.	2-Ply c.l.	2-Ply l.c.l.	3-Ply c.l.	3-Ply l.c.l.
No. 1 grade	$1.15	$1.40	$1.45	$1.60	$1.75	$1.90
No. 2 grade	1.10	1.25	1.25	1.40	1.50	1.65

Asbestos asphalt-saturated felt (14 lb. per square) costs $6.50 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $1.85 per roll in carload lots and $2.10 for smaller quantities.

Shingles, red and green slate finish, cost $4.75 per square in carloads, $5 in smaller quantities, in Philadelphia.

ROOFING MATERIALS—Prices per ton f.o.b. New York or Chicago:

	Carload Lots	Less Than Carload Lots
Tar felt (14 lb. per square of 100 sq.ft.)	$61.00	$62.00
Tar pitch (in 400-lb. bbl.)	15.00	16.50
Asphalt pitch (in barrels)	29.00	30.50
Asphalt felt	60.00	62.00

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotations from mill:

	Large Lots Pittsburgh	St. Louis	Chicago	San Francisco	New York Dec. 1. 1917	New York One Yr. Ago
Blue Annealed						
No. 10	*4.25*	*5.42*	*5.45*	*8.25*	*5.445*	4.25
No. 12	*4.30*	*5.47*	*5.50*	*8.30*	*5.495*	4.30
No. 14	*4.35*	*5.52*	*5.55*	*8.35*	*5.545*	4.35
Black						
Nos. 18 and 20	*4.80*	*6.32*	*6.25*	*8.30*	*6.245*	3.80
Nos. 22 and 24	*4.85*	*6.37*	*6.30*	*8.35*	*6.295*	3.85
No. 26	*4.90*	*6.42*	*6.35*	*8.40*	*6.435*	3.90
No. 28	*5.00*	*6.52*	*6.45*	*8.50*	*6.445*	4.00
Galvanized						
No. 10	*5.25*	*6.97*	*6.80*	....	*6.695*	....
No. 12	*5.35*	*6.97*	*6.80*	*8.60*	*6.795*	4.50
No. 14	*5.35*	*6.97*	*6.80*	*8.60*	*6.795*	4.50
Nos. 18 and 20	*5.65*	*7.17*	*7.10*	*8.90*	*7.095*	4.90
Nos. 22 and 24	*5.80*	*7.32*	*7.25*	*9.05*	*7.245*	5.30
No. 26	*5.95*	*7.47*	*7.40*	*9.20*	*7.395*	5.45
No. 28	*6.25*	*7.77*	*7.70*	*9.50*	*7.695*	5.75

LINSEED OIL—These prices are per gallon:

	New York Dec. 1. 1917	New York One Year Ago	Cleveland Dec. 1. 1917	Cleveland One Year Ago	Chicago Dec. 1. 1917	Chicago One Year Ago
Raw in barrels	**$1.22**	$1.01	**$1.25**	$1.05	**$1.22**	$0.96
5-gal. cans	**1.32**	1.11	**1.40**	1.15	**1.32**	1.06

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red Dec. 1, 1917 Dry	Red Dec. 1, 1917 In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White Dec. 1, 1917 Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	12.25	12.50	10.50	11.00	12.00	10.50
25- and 50-lb. kegs	12.50	12.75	10.75	11.25	12.25	10.75
12½-lb. keg	12.75	13.00	11.00	11.50	12.50	11.00
1- to 5-lb. cans	14.25	14.50	12.50	12.50	14.50	12.50

LUMBER—Price per M in carload lots:

Rough Douglas Fir, No. 1 Common—More than carload lots in San Francisco:

Size in Inches	15 Ft. and Under	16 to 24 Ft.	25 to 32 Ft.
3 and 4x4	$24.00	$25.50	....
3 and 4x6 and 8	24.00	24.50	$25.50
6x6 and 8x8	24.50	25.50	25.50
3 and 4x10	24.00	25.50	26.50
6 and 8x10	25.00	26.00	27.00
3 and 4x12	24.00	25.50	26.50
6 and 8x12	25.50	26.50	26.50
10 and 12x12	25.00	25.00	27.00
3 and 4x14	25.00	27.00	28.00
6 and 8x14	26.50	27.50	27.50
7 and 9x14	27.50	28.50	28.50
10 and 12x14	26.00	26.00	28.00

Square Edge and Sound Green

	Southern Pine New York 20 Ft. and Under	Southern Pine New York 22-24 Ft.	Southern Pine Chicago 20 Ft. and Under	Southern Pine Chicago 22-24 Ft.	Yellow Pine St. Louis 20 Ft. and Under	Yellow Pine St. Louis 22-24 Ft.
3 x 4	**$33.75**	**$34.00**	$31.75	*$32.75*	$28.75	*$29.75*
3 x 10	**36.75**	**37.00**	**34.75**	*35.75*	*31.75*	*32.75*
3 x 12	**41.75**	**42.00**	**39.75**	**40.75**	*36.75*	37.75
3 x 14	**43.75**	*45.00*	**41.75**	*43.75*	*38.75*	*40.75*
3 x 16	**45.75**	*47.00*	43.75	45.75	40.75	42.75
3 x 18	**48.75**	*51.00*	46.75	*49.75*	43.75	46.75
4 x 20	**51.75**	*54.00*	49.75	*52.75*	46.75	*49.75*

Over 24 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sizes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Prices from Lumberman's Bureau.

	8 x 8-In. x 20 Ft. and Under Y.P.	8 x 8-In. x 20 Ft. and Under Fir	8 x 8-In. x 20 Ft. and Under Hemlock	8 x 8-In. x 20 Ft. and Under Spruce	12 x 12-In., 20 Ft. and Under Y.P.	12 x 12-In., 20 Ft. and Under Fir
Boston	....	....	....	$40.00	....	....
Seattle	**$23.00**	**$23.00**	**$23.00**	23.00	**$23.00**	**$23.00**
Los Angeles	....	30.00	30.00	....	....	....
New Orleans	26.00	....	....	....	38.00	....
St. Paul	....	38.00	**38.00**	38.00	....	**51.00**
Denver	....	**32.00**	....	**28.50**	....	**34.00**
San Francisco	....	24.00	24.00	....	....	24.00

	1-In. Rough 10 In. x 16 Ft. and Under Y.P.	1-In. Rough 10 In. x 16 Ft. and Under Fir	1-In. Rough 10 In. x 16 Ft. and Under Hemlock	2-In. T. and G. 10 In. x 16 Ft. Y.P.	2-In. T. and G. 10 In. x 16 Ft. Fir
Seattle	**$23.00**	**$23.00**	**$23.00**	**$23.00**	**$23.00**
New Orleans	26.00	....	....	24.00	....
San Francisco	....	24.00	24.00	....	24.00
St. Paul	....	**53.00**	34.00	**61.00**	37.50
Denver	....	30.00	30.00	....	30.00

Yellow Pine—Dallas. Price per M:

2x4 to 2x12—12, 14 and 16	$32.50
2x4 to 2x12—10, 18 and 20	35.00
2x4 to 2x12—22 and 24	37.50
4x4, 4x6, 6x6, 8x8 and 3x8	40.00
8x10, 10x10 and 3x10	42.50
12x12 and 3x12	42.50

NAILS—The following quotations are per keg from warehouse:

	Pittsburgh	St. Louis	Chicago	San Francisco	Dallas
Wire	**$3.50**	**$4.30**	*$4.25*	**$4.70**	**$4.50**
Cut	....	**5.25**	*4.40*	6.15	....

MISCELLANEOUS

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Boston	21.5	New Orleans	30.7
Buffalo	11.6	New York	19.5
Chicago	18.9	Pacific Coast (all rail)	75.0
Cincinnati	15.8	Philadelphia	18.5
Cleveland	10.5	St. Louis	23.6
Denver	68.6	St. Paul	32.9
Kansas City	43.6		

Note—Add 3% transportation tax.

WATER TREATMENT CHEMICALS—Prices per pound are as follows:

	New York¹	Chicago
Sulphate of alumina (iron free), in 400-lb.barrel	$0.045	....
Hypochlorite of lime (bleaching powder), in 700-lb. drums	.03	....
Soda ash, in 400-lb. bbl.	.05	.03¾ to 4
Liquid chlorine in 100-lb. cylinders	175	.16 to .18

Lime is quoted separately.

CONTRACTORS' MISCELLANEOUS SUPPLIES

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

Dec. 1, 1917	One Month Ago	One Year Ago
$4.00 to $5.00	$4.00 to $5.00	$3.00

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York	St. Louis	Chicago	San Francisco
Galvanized	10—2½%	10—2½%	10—2½%	**+40%**
Bright	20—2½%	20—2½%	20—2½%	15%

Note—Change in price imminent

MANILA ROPE—For rope smaller than ⅝-in. the price is ½ to 2c. extra; while for quantities amounting to less than 600 ft. there is an extra charge of 1c. The number of feet per pound for the various sizes is as follows: ⅝-in., 8 ft.; ¾-in., 6; ⅞-in., 4½; 1-in., 3½; 1⅛-in., 2 ft. 10 in.; 1¼-in., 2 ft. 4 in. Following is price per pound for ⅝-in. and larger, in 1200-ft. coils:

Boston	*$0.35*	New Orleans	$0.33
New York	.35	Los Angeles	.34
Chicago	.37½	Seattle	.33½
St. Paul	.34	Denver	.35½

EXPLOSIVES—Price per pound in small lots at cities named:

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	Gelatin 80%	Black Powder
New York	......	$0.27½	$0.34½	......	$2.50*
Boston	......	......	.36¼	$0.43¾	....
New Orleans	......	.27½	.34½	......	....
Los Angeles	$0.24	.30	.39	......	....
Seattle	.18½	.24¾	.31¾	.41¾	....
Chicago	.19¾	.23¾	.33	.43	2.45*
St. Paul	.20	.26¼	.33¼	......	2.55*
St. Louis	.16½	.20½	.29½	.39½	2.15*
Denver	.19	.25¼	.32¼	.42¼	....
Dallas	.25	.29	.39	.49	....

*Keg.

POLES—Price of Western red cedar poles is as follows:

	New York Dec. 1, 1917	New York One Year Ago	Chicago	St. Louis	Denver
6 in. by 30 ft.	$5.59	$4.77	$4.94	$4.94	$4.32
7 in. by 30 ft.	7.40	5.90	6.60	6.60	5.80
7 in. by 35 ft.	10.70	....	9.60	9.60	8.55
8 in. by 35 ft.	12.20	9.75	10.90	10.90	9.65
7 in. by 40 ft.	12.35	9.95	11.00	11.00	9.75
*8 in. by 45 ft.	18.20	14.45	16.20	16.20	14.30
*8 in. by 50 ft.	21.85	16.85	19.45	19.45	17.15

*10c. higher freight rates on account of double loads.

For plain pine poles, delivered New York, the price is as follows:

10-in. butts, 5-in. tops, length 20-30 ft.	$5.00
12-in. butts, 6-in. tops, length 30-40 ft.	7.50
12-in. butts, 6-in. tops, length 41-50 ft.	8.50
14-in. butts, 6-in. tops, length 51-60 ft.	16.00
14-in. butts, 6-in. tops, length 61-71 ft.	17.50

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and St. Louis the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York Dec. 1, 1917	New York One Month Ago
Heavy melting steel scrap	**$25.00 to 26.00**	$23.50 to 24.50
No. 1 railroad wrought	32.00 to 33.00	32.00 to 33.00
Stove plate	**20.00 to 20.50**	18.00 to 19.00
No. 1 machinery cast	26.00 to 27.00	26.00 to 27.00
Machine shop turnings	**15.00 to 16.00**	14.00 to 15.00
Cast borings	**17.00 to 18.00**	16.00 to 17.00
Railroad malleable cast	27.00 to 28.00	27.00 to 28.00

	Chicago Dec. 1, 1917	Chicago One Month Ago
No. 1 railroad wrought	*$25.00 to 26.00*	$28.50 to 29.00
Stove plate	**16.50 to 17.00**	15.50 to 16.50
No. 1 machinery cast	20.50 to 21.00	20.00 to 21.00
Cast borings	**16.50**	14.25 to 15.25
Machine shop turnings	**16.50**	15.00 to 15.50
Railroad malleable cast	**26.00 to 26.50**	24.00 to 25.00

	St. Louis Price Delivered Dec. 1, 1917	St. Louis Price Delivered One Month Ago
No. 1 railroad wrought	**$30.50 to 31.00**	$29.00 to 30.00
Stove plate	**16.50 to 17.00**	10.00 to 11.00
No. 1 machinery cast	19.00 to 20.50	19.00 to 20.00
Machine shop turnings	**16.75 to 17.25**	14.00 to 15.00
Cast borings	**16.50 to 17.00**	12.00 to 13.00
Railroad malleable cast	**25.50 to 26.00**	24.00 to 25.00

Proposals

For Proposals Advertised See Pages 59 to 63 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Dec. 10.	New York, N. Y.	Dec. 6
Dec. 10.	Lamoille, Ill.	Dec. 6
Dec. 12.	New York, N. Y.	Dec. 6
Dec. 20.	Wooster, Ohio Adv. Nov. 29 and Dec. 6.	Nov. 29

SEWERS

Bids Close		See Eng. News-Record
Dec. 10.	Lake Andes, S. D. Adv. Dec. 6.	Nov. 22
Dec. 11.	Oklahoma, Okla.	Dec. 6
Dec. 11.	Columbus, O.	Dec. 6
Dec. 11.	Mansfield, O.	Dec. 6
Dec. 12.	Glasgow, Neb.	Dec. 6
Dec. 12.	New York, N. Y.	Dec. 6
Dec. 19.	Baltimore, Md.	Dec. 6
Dec. 30.	Rocky River, Ohio	Nov. 29

BRIDGES

Bids Close		See Eng. News-Record
Dec. 10.	St. Augustine, Fla.	Nov. 15
Dec. 10.	St. Paul, Neb.	Nov. 29
Dec. 10.	Spartanburg, S. C.	Dec. 6
Dec. 11.	Nelson, Pa.	Nov. 29
Dec. 11.	Harrisburg, Pa.	Dec. 6
Dec. 12.	New York, N. Y.	Nov. 22
Dec. 12.	Fairmount, W. Va. Adv. Dec. 6.	Dec. 6
Dec. 18.	Kansas City, Mo. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 18.	Beatrice, Neb.	Dec. 6
Dec. 18.	Princeton, Minn.	Dec. 6
Dec. 21.	Kansas City, Mo. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 21.	Pocatello, Idaho	Dec. 6
Dec. 21.	Necedah, Wis.	Dec. 6
Dec. 22.	Livingston, Ala.	Nov. 29

STREETS AND ROADS

Bids Close		See Eng. News-Record
Dec. 10.	Washington	Nov. 29
Dec. 10.	Gilmer, Tex.	Nov. 29
Dec. 10.	Sacramento, Cal.	Dec. 6
Dec. 10.	Fresno, Cal.	Dec. 6
Dec. 10.	Akron, O.	Dec. 6
Dec. 10.	Pleasant Hill, Mo.	Dec. 6
Dec. 10.	Spartanburg, S. C.	Dec. 6
Dec. 10.	Sacramento, Cal.	Dec. 6
Dec. 10.	Seattle, Wash.	Dec. 6
Dec. 11.	Calexico, Cal.	Dec. 6
Dec. 11.	East View, O.	Dec. 6
Dec. 11.	St. James, Minn.	Nov. 22
Dec. 11.	Granite Falls, Minn.	Nov. 22
Dec. 11.	Geneva, Ala.	Nov. 29
Dec. 11.	Pennsylvania Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 12.	Anderson, Ind.	Nov. 29
Dec. 12.	Knox, Ind.	Dec. 6
Dec. 12.	New York, N. Y.	Dec. 6
Dec. 12.	Brooklyn, N. Y.	Dec. 6
Dec. 15.	Jasper, Ala.	Nov. 29
Dec. 15.	Fitchburg, Mass. Adv. Nov. 29	Nov. 29
Dec. 15.	Hatley, Que.	Dec. 6
Dec. 17.	Los Angeles, Cal.	Dec. 6
Dec. 17.	Okmulgee, Okla. Adv. Nov. 29 and Dec. 6.	Dec. 6
Dec. 17.	Everett, Wash.	Dec. 6
Dec. 22.	Dayton, O.	Dec. 6
Dec. 27.	Elizabeth, N. J.	Nov. 29
Dec. 29.	Huntington, Ind.	Dec. 6
Dec. 31.	Bay Minette, Ala.	Dec. 6

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Dec. 10.	Clarion, Ia.	Nov. 29
Dec. 11.	Madison, Minn.	Dec. 6
Dec. 14.	El Centro, Cal.	Nov. 29
Dec. 14.	Ivanhoe, Minn.	Dec. 6
Dec. 14.	Buffalo, Minn.	Dec. 6
Dec. 15.	Sheboygan, Wis.	Dec. 6
Dec. 15.	Toronto, Ont.	Dec. 6
Dec. 18.	Elbow Lake, Minn.	Dec. 6
Dec. 20.	Albany, N. Y. Adv. Nov. 29 and Dec. 6.	Nov. 29

BUILDINGS

Bids Close		See Eng. News-Record
Dec. 8.	Gary, Ind.	Dec. 6
Dec. 10.	East Cleveland (Cleveland P. O.) O.	Nov. 22
Dec. 10.	Syracuse, N. Y.	Dec. 6
Dec. 10.	Akron, Ohio	Dec. 6
Dec. 12.	Wellesley, Mass.	Dec. 6
Dec. 12.	New Hampton, N. Y.	Dec. 6
Dec. 15.	Gallup, N. M.	Nov. 29
Dec. 15.	Kokomo, Ind.	Dec. 6
Dec. 17.	Kenmore, Ohio	Nov. 29
Dec. 17.	New Paltz, N. Y. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 17.	Pittsburgh, Kan.	Nov. 29
Dec. 17.	East Cleveland (Cleveland P. O.) O.	Dec. 6
Dec. 17.	Miami, Okla.	Dec. 6
Dec. 18.	Kansas City, Mo. Adv Nov. 29	Nov. 29
Dec. 21.	Shaker Heights (Cleveland P. O.) O.	Dec. 6
Dec. 22.	Oxford, Ohio	Dec. 6
Dec. 24.	Cleveland, Ohio	Dec. 6
Jan. 1.	Wichita, Kan.	Nov. 22
Jan. 15.	New York, N. Y.	Nov. 29

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Dec. 10.	Syracuse, N. Y.	Dec. 6
Dec. 11.	Albany, N. Y. Adv. Nov. 29 and Dec. 6.	Dec. 6

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Dec. 10.	Foam Fire Protection — Guantanoma, Cuba	Nov. 8
Dec. 10.	Heating System—Philadelphia, Pa.	Nov. 15
Dec. 10.	Refrigerating Apparatus, etc.—Washington, D. C. Adv. Nov. 22.	Nov. 22
Dec. 10.	Cranes—Philadelphia, Pa.	Nov. 29
Dec. 10.	Piping, etc.—Philadelphia, Pa.	Nov. 29
Dec. 10.	Cranes — New London, Conn.	Nov. 29
Dec. 10.	Garage—Newport, R. I.	Nov. 29
Dec. 10.	Building — Washington, D. C.	Dec. 6
Dec. 11.	Stone—New Orleans, La. Adv. Dec. 6.	Dec. 6
Dec. 12.	Generating Sets — Washington, D. C.	Dec. 6
Dec. 12.	Bridge—Fairmont, W. Va. Adv. Nov. 29	Nov. 29
Dec. 14.	Rip Rap—Galveston, Tex. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 17.	Post Office—Denton, Tex.	Nov. 8
Dec. 17.	Wharf and Boathouse—Santa Rosa, Fla. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 17.	Motor Generator Sets — Washington, D. C.	Dec. 6
Dec. 17.	Seaman Gunners' Quarters Washington, D. C.	Dec. 6
Dec. 18.	Laterals — Torrington, Wyo.	Nov. 1
Dec. 19.	Dredging—San Francisco, Cal.	Dec. 6
Dec. 21.	Dredging — Philadelphia, Pa.	Nov. 29
Dec. 26.	Sewerage System, Water Supply Intake, Reservoir —Washington, D. C.	Dec. 6
Dec. 27.	Post Office — Alexandria, La. Adv. Nov. 22 and 29.	Nov. 22
Dec. 27.	Steam Heating System—Shawnee, Okla.	Dec. 6
Jan. 4.	Buildings — Grande Isle, La. Adv. Dec. 6.	Dec. 6
Jan. 7.	Post Office — Eldorado, Kan.	Dec. 6
Jan. 7.	Post Office — Shawnee, Okla.	Dec. 6
Jan. 28.	Post Office—Sunbury, Pa.	Dec. 6

MISCELLANEOUS

Bids Close		See Eng. News-Record
Dec. 17.	Docks—Seattle, Wash.	Dec. 6
Jan. 2.	Improving Harbor — Newport, Ore. Adv. Nov. 29 and Dec. 6.	Nov. 29

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

Mass., Worcester — City plans to issue $200,000 bonds to improve water-system on Asabumskit water shed and Pine Hill dam. F. A. McClure, city engr.

Pa., Quarryville — Boro. voted $25,000 bonds to build water system. P. Helm, secy.

Md., Hagerstown—Washington Co. Water Co. having surveys made in Blair's Valley, relative to constructing reservoir to increase water supply in Hagerstown

Va., Hopewell—City plans to issue $75,000 bonds to build water, sewer and electric-light systems.

N. C., Durham—City plans to issue $100,000 bonds to build water system, including pumping equipment, reservoir, etc. G. W. Woodward, clk.

Fla., Titusville—City voted $40,000 bonds to improve water-works.

O., Logan — Village will issue $15,000 bonds to build water system.

O., Sebring—City voted $125,000 bonds to purchase water system and build filtration plant. Noted Oct. 4.

Ind., South Bend — City plans to build 225,000 gal. reservoir. F. J. Anderson, city engr.

Mich., Grand Rapids—(Official)—City to sell $100,000 bonds to improve water system. G. J. Wagner, city engr.

Ill., Chicago—City plans to install water service pipes, etc., during 1918. About $500,000. J. Ericson, city engr.

Wis., Campbellsport — Village having plans prepared by J. Donna, engr., 720 New York Ave., Sheboygan, for water and sewerage systems. Noted Aug. 16.

Wis., Hartford—City having plans prepared by A. Martin, engr., Hartford, building pump house and reservoir. About $20,000.

Ia., Beloit—Village plans to install water-works.

Minn., St. Cloud—See "Sewers."

Kan., Lawrence — City to sell $18,000 bonds to improve water system, including 10 meters, well, and transmission lines. C. H. Dunmire, city engr.

Mo., Bowling Green—See "Buildings."

Tex., Ft. Worth—(Official)—City having plans prepared by J. H. Gregory, engr., 170 Bway., New York City, improving water filtration plant, including additional rapid filters, new filters, settling basins, mixing chamber, chemical house, and aeration chamber. About $85,000. Noted June 14.

Okla., Anthon—City plans to build water system.

Okla., Jenks—City election son to vote on bonds to build water system.

Okla., Pawhuska—City to issue $20,000 bonds to improve water system.

Okla., Quapaw—City election Jan. 1 to vote on $75,000 bonds to build water and sewerage systems.

Okla., Yale—City plans to improve water systems.

Wash., Spokane — City voted $10,000 bonds to build water system in Empire Heights. A. G. Butler, city engr.

Cal., Mercer—City plans to build water and light systems. C. D. Martin, city engr.

Water-Works (Continued)

Ont., Wallaceburg—Town Council plans to improve water-works. L. G. McNeice, city engr.

BIDS DESIRED

N. Y., New York—(Official)—Until Dec. 10, by W. Williams, comr. water supply, gas and electricity, Municipal Bldg., hauling and laying water mains and appurtenances in East 177th St. (Bronx Boro.)

N. Y., New York—(Official)—Until Dec. 12, by W. Williams, comr. water supply, gas and electricity, Municipal Bldg., for laying water mains and appurtenances in 5th Ave. and Delancy St., to connect with shafts Nos. 18 and 20 of City tunnel, Catskill Aqueduct; also cross-connections existing trunk mains in Bway., Central Park West, Amsterdam, Columbus, 8th and 9th Aves., and in West 42nd St.

N. J., Jersey City—(Official)—Until Dec. 11, by Bd. City Comrs. furnishing and delivering 20 tons special castings, hydrant connections, plugs, caps, sleeves, bends, branches, etc.; also c.i. water pipe, 50 tons water gate boxes and covers, also manhole heads and covers. F. A. Dolan, city clk. C. A. Van Kuren, city engr.

Md., Baltimore—Until Dec. 19, by City, for brass pipes, fittings, brass and bronze castings, lead lined wrought iron pipe and fittings, c.i. pipe and fittings, etc. W. E. Lee, water engr.

Ill., La Moille—(Official)—Until Dec. 10, by F. A. Rambo, village clk., improving water system, including water mains, fire hydrants, etc. About $19,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

O., Wooster—City received low bids improving water system, (a) stand pipe, (b) furnishing 575 tons, 16-in. pipe, (c) pump house, from L. J. Wrench Co., Chicago, (a) $16,580; Pittsburgh-Des Moines Steel Co., Curry Bldg., Pittsburgh, (a) $17,050; Chicago Bridge & Iron Co., 37 Van Buren St., Chicago, (a) $22,480; Massillon Iron & Steel Co., Massillon, O., (b) $54.85; Hardware & Supply Co., Hower Bldg., Chicago, (b) $55; United States Cast Iron Pipe Co., 122 South Michigan Ave., Chicago, and Amer. Cast Iron Co., 1 Bway., New York City, (b) $55.15; Keystone Drilling Co., Beaver Falls, Pa., (c) $1650. Noted Nov. 8.

★Neb., Sidney—City let contract building extension to water and sewer mains, to Gordon Constr. Co., 334 Century Bldg., Denver. Noted June 21.

★Wash., Bremerton—City let contract building concrete reservoir for water system to W. B. Lance, Northern Bank Bldg., Seattle, $39,456. Noted Nov. 29.

★Ont., Stratford—City let contract building water basin on Romeo St., to A. G. Everitt, Chestnut St. About $15,000. Contractor is in market for 150 bags portland cement. Noted Nov. 1.

SEWERS

Proposed Work

N. J., Boonton—Jersey City Comrs. having plans prepared by C. Potts, engr., 30 Church St., New York City, for sewage disposal plant to be built here.

N. J., Pleasantville — City rejected bids building sewerage system. About $200,000. Noted Nov. 1.

Pa., Erie—City plans to build storm and sanitary sewers in Myrtle and other streets. About $70,000. F. G. Lynch, city engr.

Pa., Lewisburg — City defeated $25,000 bonds to build sewage disposal plant. Noted Sept 13.

Va., Hopewell—See "Water-Works."

Tenn., Kingsport — See "Streets and Roads."

O., Ashtabula—City plans to build sanitary sewers in Humphrey Pl., Samuel St., and Perryville Ave. L. A. Amsden, city engr.

O., Cincinnati—(Official)—City to issue $54,500 bonds to build sewers on California Ave., Reading Rd., Bank St. between Linn and Whiteman Sts., and other streets and avenues. F. S. Krug, city engr.

O., Youngstown—(Official) — City plans to build sewer on Hunter Ave. from Japan St. to City Lot 293¼; on Hilton Ave., from Market St. to Southern Blvd.; on Sillman St. from Steel to Oneta St. F. M. Lillie, city engr.

Ind., Anderson—City having plans prepared for rebuilding sewerage system by providing greater drainage for southern part of city, also eliminating Green branch with large sewer. About $450,000. G. L. Clausen, 139 N. Clark St., Chicago, engr.

Mich., Grand Rapids—(Official)—City to sell $55,000 bonds, Dec. 10, to build sewers in Pearl, Sheldon, Fairbanks and Canton Sts., Sinclair Ave.; also Silver Creek sewerage system. G. J. Wagner, city engr.

Ill., Chicago—City plans to build 260 mi. of sewers in 1918. About $1,500,000. J. Ericson, city engr.

Wis., Campbellsport — See "Water-Works."

Wis., Madison—City having plans prepared building sanitary sewer in Orchard St. E. E. Parker, city engr.

Wis., Waukesha—City sold $10,000 bonds to build sewers. T. C. Martin, city clk.

Wis., Wrightstown — City having plans prepared by Orbert & Albert, engrs., Green Bay, building 1 mi. sewers. About $15,000.

Ia., Humboldt—City having plans prepared, buildings sewers and sewage disposal plant.

Ia., Iowa City—City plans to build 12 in. vitr. storm sewers in Lyon's addition between Dodge and Lucas Sts. S. N. Hands, city engr.

Minn., St. Cloud—City rejected bids laying sewers and water mains in 7th and 9th Aves. Work will be readvertised in the spring. C. E. Borrowman, city engr.

Mo., Kansas City—(Official) — City receives bids about Jan. 1, building 1st section Blue River sanitary sewer, from Missouri River to south city limits, about 13½ mi.; sewer will vary in size from 24 in. pipe at south city limits to 10 ft. rein.-con. section at Missouri River. About $2,000,000. A. D. Ludlow, engr. of sewers. Noted Nov. 29.

Okla., Cushing—City having plans prepared building sewer in Dist. No. 24. L. P. Wharton, clk.

Okla., McAlester—City plans to extend sewage disposal plant and outfall sewer. About $50,000. A. H. Kindrick, city engr.

Okla., Quapaw—See "Water-Works."

Okla., Tulsa—Council passed ordinance creating sewer in Dist. No. 133. H. H. Wyss, city engr.

BIDS DESIRED

N. Y., New York—(Official)—Until Dec. 12, by M. M. Marks, boro. pres., building emergency repairs to outlet sewer in East 42nd St. from East River to 3rd Ave.

O., Columbus—(Official)—Until Dec. 11, by G. A. Borden, dir. pub. serv., building sewers on Markeson Ave., from 17th to 18th St., in alley north of 17th Ave. from alley east of Cleveland Ave., on 16th Ave. from Cleveland Ave. to alley east, thence to alley north; on 15th Ave. from Cleveland Ave. to alley east. H. Maetzel, city engr.

Mont., Glasgow—Until Dec. 12, by City, building sanitary and drainage sewer in Dist. No. 38. C. H. Blitman, city engr.

O., Mansfield—(Official)—Until Dec. 11, by Secy. Bd. Control, building 8 in sewer on Diamond and Ford Sts. from center of Inlot No. 1650 to Woodville Rd. in south side of South Diamond St., and from point in front of Inlot No. 915 to Diamond St. on south side of Ford St. W. J. Hazleton, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Oil City—(Official)—City let contract building storm sewers in portions Alcorn and Siverly Aves. and Wayne St.; also sanitary sewers in portions Alcorn, Siverly, Keith, Pierce and Kramer Aves., Wayne and Martin Sts., involving 13,000 ft., 6-18 in 18-24 ft., terra cotta pipe, 390 ft. 18-24 ft. rein.-con. pipe to Lesher & Roess, Oil City, $20,413. Noted Nov. 1.

★Ind., Indianapolis — City let contract building sewer on East 30th St., between Hillside Ave. and School St., to Columbia Constr. Co., Indianapolis, $93,687. Noted Nov. 1.

★Ia., Sioux City—City let contract building sewer on Meyer Ave., outlet to South Morningside sewerage system, to F. T. Leeder, 73c. per ft. 8-in. pipe, either vitr. or concrete.

★Kan., Augusta—City let contract building storm sewer, to McCoy & Taylor, Wichita, $16,000.

★Neb., Sidney—See "Water-Works."

★Mo., Carthage—City let contract building trunk line sewer in western part of city, to McDonald Constr. Co., Moberly, $30,000. Noted Nov. 29.

★Mo., Kansas City — City let contract building sewer in Dist. No. 409, Div. No. 5 to C. H. Crosby, $49,526.

★Tex., Seguin—City let contract building sewerage system and sewage disposal plant, to Kirkwood & Wharton, San Antonio, $29,835. Noted Oct. 25.

BRIDGES

Proposed Work

W. Va., Fairmont—(Official)—Until Dec. 12, by City, building rein.-con. bridge over Monongahela River; A. J. Kern, city clk.; advertised in this issue.

Ky., Paducah—City plans to build rein.-con. bridge over Island Creek on Bridge St. L. A. Washington, comr. pub. wks. About $17,000.

Ia., Dyersville—Dubuque Co. had plans prepared for rein.-con. bridge, two 70-ft. spans, 40 ft. roadway, 6 ft. sidewalks. About $32,000. W. B. Turlay, co. engr.

Minn., Ballclub—Itasca Co., Grand Rapids, soon lets contract building bridge over Mississippi River. About $20,000.

Minn., Mazeppa—City retained J. H. A. Brahtz, engr., Commercial Bldg., St. Paul, to prepare plans for rein.-con. and steel bridge. About $40,000.

Ark., Little Rock—Pulaski Co. receives bids about Jan. 15, building rein.-con. bridge, 40 ft. wide between curbs with 8 ft. walks. About $800,000. W. Donaghey, Bankers Trust Bldg., chn. comrs. D. C. Luten, Indianapolis, Ind., engr.

Okla., Holdenville—See "Streets and Roads."

Wash., Port Orchard—See "Streets and Roads."

Cal., Red Bluff — Bd. Supervs., Tehama Co., had plans prepared by Weeks & Day, engrs., Phelan Bldg., San Francisco, for following rein.-con. bridges: 12 span over Thomas Creek, cost, $100,000; 8 span over Deer Creek, $50,000; 4 span over Mill Creek, $40,000; 4 span over Red Bank Creek, $40,000; 400-ft. bridge over Toomes Creek, $30,000; 4 span over Dry Creek, $10,000; 3 span over Antelope Creek; also subway under Southern Pacific tracks, $20,000.

BIDS DESIRED

Pa., Harrisburg—(Official)—Until Dec. 11 by State Pub. Grounds & Bldgs. Dept. for 180-ft. steel truss bridge with solid floor and stone abutments. C. A. Flink, 301-303 Commonwealth Trust Bldg., engr.

S. C., Spartanburg—Until Dec. 10, by Spartanburg Co. Highway Comn., building 5 concrete bridges in connection with some road work.

Wis., Necedah—(Official)—Until Dec. 21, by Juneau Co. building, Pentenwell Bridge over Wisconsin River, between Necedah and Strongs Prairie, Adams Co., consisting of four 40-ft. riveted truss spans and 18-ft. roadway, involving 197 tons steel, 711 cu.yd. concrete, wood-block floor, piles and riprap. M. W. Torkelson, engr.

Neb., Beatrice—Until Dec. 18, by E. P. Burnham, clk., Gage Co., building one 45 ft. and one 50 ft., 3 panel, pin connected low truss bridges, 15-ton steel span, 16-ft. roadway and wooden floors, Sects. 9 and 16, Liberty Twp.

Okla., Okmulgee — See "Streets and Roads."

Tex., Canyon—See "Streets and Roads."

Idaho, Pocatello—Until Dec. 21, by Bannock Co. Comrs., building 60 ft. steel bridge over Port Neuf River, south of Pocatello. C. W. Pomeroy, clk.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Winchendon—Town let contract building bridge in Spring St., to Wiley & Foss, Central and Brook Sts., Fitchburg, $19,000.

Bridges (Continued)

★**S. C., Charleston**—(Official)—Sanitary and Drainage Comn., Charleston Co., let contract building steel draw bridge over Dawhoo River, to Austin Bros., 156 Greenwood Ave., Atlanta, Ga., $28,500. Noted Nov. 8.

Fla., Miami—Dade Co. received only bid building bridge across Snake Creek Canal from Champion Bridge Co., Wilmington, Ohio, $11,995. Noted Nov. 15.

★**Neb., North Platte**—Lincoln Co. let contract rein.-con. bridge over South Platte River, to E. F. Pettis, Lincoln. About $10,000. Noted Sept. 27.

★**Mont., Myers**—State Highway Comn., Helena, let contract 152-ft. steel span bridge to Security Bridge Co., Billings. About $11,800.

★**Okla., Bartlesville**—Washington Co. let contract building 8 bridges, to Rochester Bridge Co., Bartlesville, $73,284. Noted Nov. 15.

STRUCTURAL STEEL WORK

Proposed Work

Minn., Mazeppa—See "Bridges."

BIDS DESIRED

Pa., Harrisburg—(Official)—See "Bridges."

Neb., Beatrice—See "Bridges."

Mo., Kansas City—See "Streets and Roads."

Idaho, Pocatello—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mont., Myers**—See "Bridges."

REINFORCED CONCRETE

Proposed Work

N. J., Ocean—See "Buildings."

Pa., Johnstown—See "Industrial Works."

Ky., Paducah—See "Bridges."

Ala., Bimingham—See "Industrial Works."

Ill., Chicago—See "Industrial Works."

Ia., Burlington—See "Industrial Works."

Ia., Davenport—See "Industrial Works."

Minn., Mazeppa—See "Bridges."

Neb., Omaha—Office and Service Station—See "Buildings."

Mo., Kansas City—See "Sewers."

Ark., Little Rock—See "Bridges."

Tex., Canyon—See "Streets and Roads."

Ariz., Tuscon—See "Industrial Works."

Cal., Red Bluff—See "Bridges."

BIDS DESIRED

N. Y., Syracuse—See "Industrial Works."

S. C., Spartanburg—See "Streets and Roads."

Wis., Necedah—(Official)—See "Bridges."

Minn., Princeton—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Conn., Bridgeport**—Tunnel—See "Miscellaneous."

★**N. J., Bloomfield**—See "Industrial Works."

★**Pa., Oil City**—See "Sewers."

★**O., Sandusky**—See "Buildings."

★**Ind., Terre Haute**—See "Buildings."

★**Ill., Chicago**—See "Industrial Works."

★**Kan., Wichita**—See "Industrial Works."

★**Neb., North Platte**—See "Bridges."

★**Wash., Bremerton**—See "Water-Works."

STREETS AND ROADS

Proposed Work

R. I., Warwick—Town plans to appropriate $30,000 for building following roads: Pawtuxet Ave., Norwood; Gate Rd. from Apponaug to Norwood; Warwick Neck Rd. from Warwick Sta. south and Buttonwoods from Carpenter Corner to Budlongs Corner.

N. Y., Rochester—City plans to pave portion Thurston Rd., asphalt, and Jones St., brick. About $21,000 and $15,000, respectively. F. Elwood, city engr.

N. J., Bayonne—(Official)—City rejected all bids received Nov. 27 for laying concrete sidewalks on East 22nd St. W. L. Clarkson, city engr. Noted Nov. 15.

N. J., Freehold—Bd. Freeholders Monmouth Co., plan to issue $75,000 bonds, to be used towards building 3rd, 4th, 5th, and 7th sections. Pennsgrove-Malaga State Rd. G. D. Cooper, Red Bank, co. engr.

N. J., Salem—Bd. Freeholders Salem Co. plans to issue $75,000 bonds for road work in Pennsgrove Twp.

Pa., Harrisburg — (Official) — Council passed ordinance to pave and curb Bailey St. from 12th St. to property of Messiah Rescue Home. M. B. Cowden, city engr.

Pa., New Brighton—Boro. plans paving, grading and widening sidewalks on 7th Ave. from 14th and 15th St.; 8th Ave. from 9th to 10th St., 14th Ave. from 2nd to 5th St., and 3rd Ave. H. T. Barber, boro. engr.

Pa., Pittsburgh—Allegheny Co. plans to build 50-ft. rein.-con. boulevard from end East Carson St. to McKeesport. About $650,000.

Pa., Pittsburgh—City passed ordinance to grade, pave and repave portion Bigelow Blvd., also pave, grade and curb South Side Ave., from Hespen St. to Sunset Ave. R. Swan, city engr.

Ga., Albany — Dougherty Co. plans to build 10 mi. highway between Albany and Acree.

Ga., Waycross—Ware Co. Comrs. voted to pave 20 mi. Dixie Highway between Waycross and Pierce County line with Beech Island gravel.

Ala., Mobile—Chickasaw Shipbuilding Co., Mobile, plans to build streets and sidewalks for town occupied by employees of plant. J. F. Coleman, genl. supt.

Miss., Iuka—Tishominge Co. sold $30,000 bonds to construct Muscle Shoals Highway. Noted Sept. 13.

La., Monroe — Ouachita Parish Police Jury plans election Feb. 9 to vote on $1,050,000 bond issue for road work, drainage, courthouse and jail.

Tenn., Kingsport — Kingsport Impvt. Corp. plans to grade streets, build sidewalks and macadam driveway and install sewers. About $16,000.

O., Ashtabula—City preparing plans paving Prospect St. from Ann to Division St. L. A. Amsden, city engr.

O., Lima—City plans to pave Main St. from Erie R.R. to O'Connor Ave., wood block. V. Miller, city engr. Noted Nov. 15.

O., Sidney—(Official) — City defeated $40,000 bond issue for opening and extending Poplar St. Noted Nov. 1.

O., Steubenville—City plans to pave and improve McLister and Murdock Aves., concrete. J. A. Leech, city engr.

O., Toledo—City Council passed resolution to pave Mallet Ave., rein.-con., also alley between Oakwood and Norwood Aves., brick. H. A. McClure, city engr.

O., West Union—A. B. C. Good Roads Assn. plans to rebuild 50 mi. State Market Rd. No. 6 through Adams, Brown and Clermont Cos. Address co. clk., West Union.

Ind., Anderson — Madison Co. plans to pave Frankton Rd., gravel and cement. About $39,606.

Ind., Danville—Hendricks Co. plans to build road through Guilford, Liberty and Franklin Twps. Federal Government and townships to appropriate $90,000 toward cost. Noted Oct. 18.

Ind., Lafayette—Tippecanoe Co. plans to build new Dresser Rd. About $96,330. G. Baxter, co. aud.

Mich., Flint — City plans laying about 125,000 sq.yd. paving and 500,000 sq.ft. of sidewalks. E. Shoecraft, city engr.

Mich., Grand Rapids—(Official)—City to sell $163,000 bonds Dec. 10, to grade and pave Tamarack, Alpine, Sheldon and Bostwick Aves., Lyon and Butterworth Sts. G. J. Wagner, city engr.

Ill., Beardstown — Town plans to pave Lafayette St. from the river to south end of town. J. Goodel, town engr.

Ill., Ottawa—La Salle Co. plans to improve 6900 ft. road, Deer Park Twp.

Ill., Peoria — City plans to resurface Bradley Ave. from Bourland Ave. to College St., concrete. E. N. Woodruff, city engr.

Ill., Winnetka — Winnetka and Kenniworth had plans prepared by Windes & Marsh, engrs., Winnetka, for paving 6,000 yd. Winnetka Ave., concrete. About $200,000.

Wis., Chippewa Falls — Chippewa Co. plans to build Eau Claire-Chippewa trunk line highway. About $28,000. W. N. Herbert, aud.

Wis., Eau Claire—Eau Claire Co. will expend $51,000 for road work. H. Nygaard, clk.

Wis., Monroe—Green Co. plans to construct Monroe-Monticello Rd. About $25,000. J. W. Stewart, co. clk.

Wis., Portage — Columbia Co. Comrs. voted $36,000 bonds to improve 7 mi. Portage-Columbia Rd. H. R. Tongen, aud. Noted Apr. 26.

Wis., Racine—City plans to pave following streets in 1918: Youth St., cost about $20,000; Asylum Ave., $9598; Milwaukee Ave., $5836; Osborne Blvd., $7279; Blake Ave., $5244; 13th, Howland, 10th, Main, Grange, Prospect, Carlisle, Albert, Geneva, 11th, Pearl Sts., Hilker and Davis Pl., St. Clair and Lake Aves., $80,019. P. H. Connolly, city engr.

Ia., Iowa City—Johnson Co. plans to improve 6½-mi. Kalona Rd. About $32,000. A. F. Fisher, co. engr.

Ia., Iowa City—City plans to pave Coralville Rd. from river to city limits. About $30,000. S. M. Hands, city engr.

Ia., Stuart—City soon lets contract paving 11 blocks.

Kan., Atchison—City soon lets contract paving about 28 blocks. F. S. Altman, city engr.

Kan., Baxter Springs—City having plans prepared by A. C. Moore, engr., Joplin, Mo., paving streets in business district, about 60 blocks. Noted Oct. 25.

Kan., Leavenworth — Golden Belt Rd. Dist., Leavenworth Co., had plans prepared building 19 mi. road. E. McNerney, chn.

Kan., Lindsborg—City plans to pave Main St., brick and concrete. Riddle & Riddle, Abilene, engrs.

Mont., Kalispell — Flathead and Teton Cos. plan to build Belton-Glacier Park Highway, from south side of Glacier Park, 57 mi. long, 12 mi. in Teton Co. and 45 mi. in Flathead Co.

Mo., Fulton—Callaway Co. voted $25,000 bonds to build roads. Noted Nov. 15.

Mo., Greenfield—(Official)—Dade Co. defeated $23,000 bond issue for improving roads between Everton, Ash Grove and Greenfield Twps. Noted Nov. 22.

Arkansas—State Highway Comn., Little Rock, having plans prepared for new road in Van Buren Co., from Formosa to county line via Shirley. About 30 mi. Cost, $64,000.

Ark., Jasper—Newton Co. Comrs. plan building 20 mi. road from Mount Judy to western county line. About $44,000.

Tex., Athens — Henderson Co. Comrs. plan election to vote on $50,000 bonds to build roads.

Tex., Beaumont—Jefferson Co. Rd. Dist. No. 1 voted $500,000 bonds to complete highway between here and Port Arthur and to pave highways between Beaumont and Houston and Beaumont and Silsbee. Noted Oct. 25.

Tex., Canyon—(Official)—Randell Co. receiving bids about Jan. 15, grading roads and building rein.-con. culverts. About $65,000. Noted Nov. 8.

Tex., Centerville—Leon Co. plans election to vote on $250,000 bonds to build roads.

Tex., Dallas—City rejected bids opened Nov. 21 for paving Knight St., from Brown to Cedar Springs and Washington Ave. from Main to Worth St.

Streets and Roads (Continued)

Tex., Galveston—State Highway Comn., Austin, appropriated $10,000 to build roads in Galveston Co.

Tex., Gonzales—Gonzales Co. plans election to vote on $75,000 bonds to build and improve highways.

Tex., Longview—Gregg Co. voted $75,000 bond issue for road work. E. W. Davis, co. engr. Noted Oct. 11.

Tex., Madisonville — Madison Co., Precinct No. 1, voted $100,000 bonds to build 2 state and national highways. Noted Nov. 8.

Tex., Meridian—Bosque Co., Rd. Dist. No. 7, election Dec. 22 to vote on $40,000 bonds to build roads.

Tex., Montague — Montague Co. plans election to vote on $300,000 bonds to build roads.

Tex., Richmond—Ft. Bend Co. plans election to vote on $400,000 bonds to build roads, Rosenberg Twp.

Okla., Alva — Woods Co. sold $58,500 bonds for road work in Waynoke Twp.

Okla., Bartlesville — City rejected bids paving 2nd and 3rd Sts. from Dewey Ave. to railroad tracks. Work will be readvertised. E. D. Kirkpatrick, city engr. Noted Nov. 29.

Okla., Frederick — City Council passed resolution to issue $44,840 bonds for improving streets.

Okla., Holdenville—Hughes Co. voted $53,000 bonds to build roads and bridges in Barrard Twp.

Okla., Tulsa—Tulsa Co. at election Nov. 20 voted $1,750,000 bond issue to construct 108 mi. roads. L. Cline, co. clk. Noted Nov. 1.

Utah—Iron, Garfield, San Juan, Kane and Washington Cos. have joined formation Grand Canyon Highway Assn., Panguitch, Garfield Co., and plan to build roads in southern part of state. Cost to be borne by Federal Government, State and Grand Canyon Highway Assn. Noted June 21.

Wash., Everett—City had plans prepared building industrial roadway along water front to Blackman's Point. About $13,311. H. Mumm, city engr.

Wash., North Yakima — City plans to hard surface North 1st Ave. About $100,000. N. A. Gilman, city engr.

Wash., Olympia — Thurston Co. plans election in spring to vote on $600,000 bonds to build and improve highways.

Wash., Port Orchard—(Official)—Kitsap Co. lets contract in spring building permanent Highway No. 1C, about 2 mi., with riprap along beach, culverts, and 1 pile trestle, 195 ft. long. About $15,000. E. E. Boester, deputy co. engr. Noted Aug. 2.

Wash., Prosser—City plans to macadamize 3800 cu.yd. of roads from city limits to business section and replace wooden walks with concrete. About $11 727.

Wash., Tacoma—Pierce Co. plans to pave 2 mi. Pioneer Highway, leading through Orting toward South Prairie; also pave 1 mi. road in Buckley.

Wash., Tacoma—City soon lets contract building concrete sidewalks in district bounded by North 42nd, 43rd, 44th, and 46th Sts. from Cheyenne to Mullan St. About $20,400. W. C. Raleigh, city engr.

Ore., Bend—Deschutes Co. plans to spend $29,000 to build roads.

Ore., Coquille—Coos Co. plans to surface 11-mi. Bandon Rd. About $30,000.

Ore., Pendleton—City Council plans paving Union St. from 5th to 10th St., 9th from Union to 9th St. bridge, 10th St. from Union to Washington St.; Washington St. from 10th to Clay St.; Clay St. from Washington to Kelly Ave., Court from 5th to 8th St.; Washington St. from 5th to Fulton St.; Kelly St. from Fulton to Alvord St.; Federal St. from Alvord to Fulton St.; Laughlin St. from Alvord to Fulton St. grading Wilson St. from Madison to Bush St.

Cal., El Segundo—City plans to pave 2½ mi. of streets, macadam. About $29,000. A. W. Cory, city engr. Noted Oct. 18.

BIDS DESIRED

N. Y., Brooklyn—(Official)—Until Dec. 12, by L. H. Pounds, boro. pres., regulating, grading, and laying sidewalks on Sedgwick Pl., from 67th St. to Wakefield Pl.; regulating and paving roadway of 36th St. from Church to 15th Ave., and 86th St. from 21st to 22nd Ave., asphalt on 6-in. concrete foundation.

N. Y., New York—(Official)—Until Dec. 12, by M. M. Marks, boro. pres., regulating and repaving 10th St., from Stuyvesant St. to University Pl., asphalt on concrete foundation; 3rd Ave. from 6th to 8th St., wood block on concrete foundation; 3rd Ave. from 6th to 8th Sts., wood block on concrete foundation, water, tar, gas specifications.

N. Y., New York—(Official)—Until Dec. 12, by D. Mathewson, boro. pres. (Bronx Boro.), regulating, grading, curbing, laying sidewalks and crosswalks, building inlets, receiving basins, drains, and culverts, etc. in West 176th St. from Jerome Ave. to Macombs Rd.; also sewer in Barkley Ave. between Clarence Ave. and Long Island Sound.

S. C., Spartanburg — (Official) — Until Dec. 10, by Comrs. Spartanburg Co., building Sect. B of Natl. Highway, 12.06 mi., in Spartanburg, Reidville and Beach Springs Twps., 20 ft. top soil roadway; also to construct Fair Forest Rd., 3½ mi. 20-ft. top soil roadway, Contr. No. 6 and building 5 concrete bridges, Contr. No. 7. Reid Tull, co. highway engr.

Ala., Bay Minette — Until Dec. 31, by Baldwin Co., building 4 mi. Bay Minette and Daphne Rd., between Stapleton and Daphne, involving 12,000 cu.yd. excav., 510 lin.ft. pipe. Noted Oct. 4.

O., Dayton—Until Dec. 22, by Montgomery Co., widening Dayton and Greenville Rd. at Salem. A. Knoop, co. engr.

O., East View—Until Dec. 11, by Town, grading, draining, curbing, paving and building sidewalks, portion Lee Rd. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ind., Huntington—(Official)—Until Dec. 29, by Grant Co., building stone road between Van Buren Twp. and Jefferson Twp. M. McRae, aud.

Ind., Knox—(Official) — Until Dec. 12, by Bd. Trustees, improving Lake St. from Main St. to western end of same; Shields St. from Lake St. to South line of New York St.; Delaware St. from Main to Shields St., asphalt, bitulithic, or wood block. R. Thompson, clk.

Minn., Princeton—Until Dec. 18, by W. C. Doan, Millelacs Co. aud., building Minnesota Federal Aid Project No. 3 involving 33,459 cu.yd. gravel surfacing, building 9 rein.-con. bridges and two 16-ft. one 20 ft., two 30-ft. and one 70-ft. beam span bridges. Noted June 7.

Mo., Pleasant Hill—(Official)—Until Dec. 10, by City building about 9000 sq.yd. macadam pavement. Noted Nov. 29.

Okla., Miami—(Official)—Until Dec. 17, by Ottawa Co. Comrs., building state and county roads. About $350,000. J. A. Walker, clk. Noted Nov. 22.

Okla., Okmulgee—(Official)—Until Dec. 17, by Okmulgee Co. Comrs., grading and building culverts and paving about 118 mi. roads. H. Hart, chn.; advertised in this issue.

Wash., Everett—(Official)—Until Dec. 17, by Snohomish Co. Comrs., building Permanent Highway No. 32. M. Weatherbee, co. aud. Noted Oct. 4.

Wash., Pasco—Until Dec. 15, by Franklin Co., graveling 30 mi. highways and grading and graveling 7 mi. J. W. Ketner, co. engr.

Wash., Seattle—(Official)—Until Dec. 10, by Puget Mill Co., Walker Bldg., for grading, curbing, building cement walks and water mains in Westholme Addition on Fauntleroy and 35th Aves. About $65,000. Address E. Folsom. Noted Nov. 15.

Cal., Calexico—Until Dec. 11, by City, paving main streets with bitulithic 5-in. concrete base and 2-in. top, and other streets with warrenite, 4-in. concrete, base and 1½-in. top. Following are streets to be paved:

2nd St., full width to Blair Ave. and strip 20 ft. wide in center of street from Blair to east city limits.

Imperial Ave., full width to 7th St. and strip 20 ft. wide in center of street from 7th St. to north city limits.

Heber Ave., full width from 2nd to Sherman Sts., to north end of high school grounds.

3rd St., widened to 56 ft. and paved full width to Mary St.

7th St., full width from Emerson to Heber St.; 4th, 5th, and 6th Sts., from Emerson to Imperial Sts.

7th St., from Imperial to Heber St., and 3rd St., from Heber to Mary St.; Emerson St., full width from 3rd to 7th St. Noted Nov. 15.

Cal., Fresno—Until Dec. 10, by D. M. Bernwell, Fresno Co., clk., building Shaver-Big Creek Rd. and portion Millwood Rd. near Squaw Valley.

Cal., Los Angeles—Until Dec. 17, by Los Angeles Co. Supervs., building macadam pavement on Doheny Drive between Wilshire Blvd. and Santa Monica Blvd., Rd. Dist. No. 3. Work involves 1918 cu.yd. excav., 3443 lin.ft. shaping road bed, 2661 sq.ft. concrete gutter, 4 in. thick, hauling and placing 839 lin.ft. cement curb, 5 x 8 x 12 in. and 382 lin.ft. 5 x 9 x 15 in., hauling and placing 1321 lin.ft. macadam pavement.

Cal., Sacramento—(Official)—Until Dec. 10, by Sacramento Co., building highway on Sacramento River Levee of Grand Island, 13.25 mi. long, involving about 17,278 cu.yd. concrete.

Que., Hatley—(Official)—Until Dec. 15, by H. B. Whitcomb, secy.-treas., building portion Massawippi and Compton Rds.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—M. E. Connolly, boro. pres. (Queens Boro.), received low bids regulating, grading, curbing and paving (a) Glasser St. from Sandol St. to Cypress Hill Rd., (b) Hill St. from Hunterspoint to Thomson Ave., (c) Beach 117th St. from Ocean to Washington Ave., from Boro. Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (a) $11,817, (c) $17,604; Uvalde Asphalt Paving Co., 1 Bway., (a) $12,450, (c) $19,407; E. W. Fitzpatrick, 128 3rd Ave., Astoria, (b) $10,788; Degnon Contg. Co., 30 East 42nd St., (b) $13,805; Peace Bros., 26 Main St., Flushing, (b) $18,240. Noted Nov. 22.

★N. Y., Rochehster—City let contract grading and building sidewalks and sewers on Grand Ave., to F V. Brotsch Co., E. & B. Bldg., $25,335. Noted Oct. 11.

★N. Y., Wingdale—Comn. on New Prisons, Hall of Records Bldg., New York City, let contract grading at Wingdale Prison, to Fallkill Constr. Co., 1 Washington St., Poughkeepsie, $40,000. Noted Nov. 8.

★N. J., Hackensack — Bd. Freeholders Bergen Co. let contract grading sidewalks on Paterson Plank Rd. in Boros. of East Rutherford and Wallington, to C M Brewster Constr. Co., $18,257.

★N. J., Jersey City — Bd. Freeholders Hudson Co., let contract furnishing crushed stone for Newark Turnpike, to W. J. Coughlin, 665 Newark Ave., $3.15 per ton. Noted Nov 22.

★N J., Trenton—(Official) — Bd. Freeholders Mercer Co. let contract paving approaches to Bakers Basin Bridge on Brunswick Pike Rd., to C. A. Reid Co., Trenton, $12,406. Noted Nov. 22.

★Pa., Phila.—G. E. Datesman, dir. pub. serv. let contract building portion Parkway east of 17th St., to Race St., to J. J. McHugh, 1430 South Penna Sq., about $47,000. Noted Nov. 29.

★S. C., Chester—Chester Co. let contract building roads to J. T. Blassingame, Greenville, S. C., $100,000. Noted Apr. 12.

Fla., Miami—Dade Co. received lowest bid building rock roads in Sect. No. 1, from Seminole Constr. Co., Miami, 7 in. thick, $42,889, 10 in. thick, $57,776; Sects. 2, 3 and 4, E. E. Collins, $33,250. Noted Nov. 15.

★Ala., Enterprise—City let contract paving streets, vitr. brick, cement concrete, bituminous concrete, macadam concrete, etc. to Southern Clay Mfg. Co., James Bldg., Chattanooga, $29,391. Noted Nov. 8.

★Indiana—Bd. Co. Comrs. let contract building roads in various townships as follows:

Floyd Co., New Albany, building 8568 ft. road, Georgetown Twp. to S. T. Games, R.R. 3, New Albany, $10,500.

Streets and Roads (Continued)

Madison Co., Anderson; building 16,006 ft. road on line between Madison and Delaware Cos., to Sullivan & Sullivan, Alexandria, $9165. Noted Nov. 8.

Ind., Kendallville—City received low bids paving South Main and Williams Sts., and certain alleys in downtown district, from Moellering Constr. Co., Murray St., and Brooke Constr. Co., 2104 Nuner St. About $52,557. Noted Oct. 25.

★**Minn., Hibbing**—St. Louis Co. let contract paving Dupont and Dublin Rds., to Malloy Bros., $32,627.

★**Minn., St. Peter**—Nicollet Co. let contract building State Rd. Nos. 5 and 9, to A. W. Webster.

★**Mo., Rock Port**—City let contract improving about 7 mi. of streets, to Western States Constr. Co., 782½ Brandeis Bldg., Omaha, $53,400.

★**Ark., Forrest City**—St. Francis Co. let contract building 42 mi. gravel, concrete and asphaltic concrete roads, Dists. No. 1 and 2 to Lewelling & Price Williams, Little Rock, $253,000. Noted Aug. 23.

★**Tex., Wheeler**—Wheeler County let contract building roads, Rd. Dist. No. 2, to Smith Bros., Crockett, $35,000. Noted Apr. 26.

★**Okla., Ardmore**—City let contract paving 3rd Ave., S.W., from H to L Sts., asphalt, to Ardmore Constr. Co., Ardmore, $15,359.

★**Okla., Oklahoma**—City let contract paving 13th St. from Lindsay Ave., asphalt, to Western Paving Co., 518 Terminal Bldg. About $12,510. Noted Sept. 13.

Wash., Clarkston—City received low bid gravel surfacing and grading 6 mi. streets from B. Bragg, Lewiston, Idaho, $1.33 per cu.yd. and 40c. per yd. respectively. Noted Nov. 8.

★**Ore., Pendleton**—City let contract paving Lewis St. from Lee to Beauregard St., and Wilson St. from Madison to Main St., to Warren Constr. Co., Journal Bldg., Portland, $10,000.

★**Cal., Los Angeles**—Los Angeles Co. let contract grading and paving portion Azusa Ave., Rd. Dist. No. 135, involving 32,000 sq.yd. concrete pavement, for which county furnishes cement, gravel and corrugated metal culverts, to Redondo Constr. Co., 218 South Redondo Ave., $18,500. Noted Nov. 1.

★**Cal., San Pedro**—Outer Harbor & Dock Co. let contract paving Miner Fill, to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., San Francisco. About $10,150.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Georgia—State R.R. Comn. granted permission to Atlanta & Anderson Ry. to issue $18,000,000 bonds for building interurban line from Atlanta to Anderson, S. C. M. Bolding, Atlanta Natl Bank Bldg., Atlanta, secy. Noted May 3.

Ohio—See "Industrial Works," Cincinnati.

Ohio—Wheeling & Lake Erie R.R., Leader-News Bldg., Cleveland, acquired 100 acres of land near Bedford, and plans large freight yard. W. L. Rohbock, ch. engr.

California—See "Industrial Works," Los Angeles.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Kentucky**—Louisville & Nashville R.R. let contract building Rockhouse Branch from Blackey to Cudills Branch for developing coal mines, to T. P. Thompson, Knoxville, Tenn. Noted Nov. 8.

★**California**—Western Pacific Ry. let contract 23½-mi. branch from Niles to San Jose to Utah Constr. Co., Phelan Bldg., San Francisco. About $800,000. Noted June 28.

EXCAVATION AND DREDGING

Proposed Work

S. C., Marion—Drainage—C. P. Roberts, Jr., and associates, plan to build drainage system here, including 4 mi. canal, 28 ft. wide.

La., Monroe — Drainage — See "Streets and Roads."

Ill., Muddy — (Official) — Excavation — Central Illinois Pub. Serv. Co. plans to excavate about 5000 yd. in cooling pond. Work is in connection with new addition to power house. D. R. Truax, purch. agt.

Ill., Woodstock — Ditch — Local Crafton Dist. No. 1, McHenry Co., plans to build 20 mi. open ditch and 15 mi. tile ditching. About $225,000. T. Homer, co. clk. G. Nelson, Sherwin Bldg., Elgin, engr.

Minn., Glenwood—Ditch—O. Irgens, aud. Pope Co. received no bids building Co. Ditch No. 15, involving 129,705 cu.yd. excav. About $14,269. Noted Nov. 8.

Kan., Manhattan—Drainage—State Dept. of Drainage and Irrigation, Topeka, soon receives bids building 2 drainage systems, involving 587,250 cu.yd. excav. J. B. Marcellus, state engr.

BIDS DESIRED

Wis., Sheboygan—Ditches—Until Dec. 15, by Sheboygan Valley D.D., Elkhart Lake, Sheboygan Co., building 6 mi. main ditch and 12 mi. laterals, involving 833,000 cu.yd. excav.

Minn., Buffalo—Ditch—Until Dec. 14, by J. A. Berg, aud., Wright Co., building Co. Ditch No. 33, involving 41,900 ft. 6-28 in. tile; 6 concrete walls; 44 intakes, 2000 ft. sheathing and 5700 ft. open ditch. About $19,718.

Minn., Elbow Lake—Ditch—Until Dec. 18, by C. M. Nelson, co. aud., building Co. Ditch No. 30, involving 28,550 ft. 6-24 in. tile. H. Dunaway, engr.

Minn., Ivanhoe—Ditch—Until Dec. 14, by K. A. Hansen, Lincoln co. aud., building Co. Ditch No. 37, involving 234,635 cu.yd. open work, 34,500 lin.ft. tile, 4 concrete drops, 8 bulkheads, 3 manholes and 12 tile inlets, about $65,015; Co. Ditch No. 34, all tile, $6938; Judicial Ditch No. 29,500 ft. open work and tile, $23,503.

Minn., Madison—Ditch—Until Dec. 11, by A. G. Shogren, aud., Lac qui Parle Co., building Co. Ditch No. 27, involving 53,806 ft. 6-14-in. clay or common tile. About $11,061.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Ind., Hartford City**—Ditch—Blackford Co. let contract building Roby Ditch in northern part of county and extending into Wells Co., to G. Frommeyer & Co., Dunkirk, $14,057.

★**Ill., Garden Prairie**—(Official)—Drainage—Coon Creek Drainage Comrs., let contract 6 mi. tile drain, to Streater Drain Tile Co., Streater, $14,314. Noted Nov. 1.

★**Ia., Rockwell City**—(Official)—Drainage—Calhoun Co. let contract improving D.D. No. 67, to Rude & Kold, Pomeroy, labor, $14,677; to Cement Products Co., tile, $19,352. Noted Nov. 22.

★**Minn., Buffalo** — (Official) — Ditch — Wright Co. let contract building Ditch No. 34, to C. P. Madsen, Hutchinson. About $17,175. Noted Nov. 15.

★**Minn., Mankato**—(Official)—Blue Earth Co. let contract building Judicial Ditch No. 25, to G. F. Widman, Webster City, Ia., $12,900; No. 21 to Peterson & Malzahn, Good Thunder, Minn., $30,750; No. 23 to New Ulm Brick & Tile Yards, $8500; No. 28 and No. 20 to Paul Paulson, Mankato, Minn., $14,700 and $39,800 respectively. No. 30 to E. Nelson, Wells, Minn., $7400. Noted Nov. 15.

★**Minn., Pipestone** — Ditch — (Official)— Pipestone Co. let contract, open work, to Northwestern Drainage Co., Thief River Falls, Minn., $0.1285 per cu.yd.; tile, to F. Bisballe, Tyler, $153,200. Noted Nov. 15.

★**Mo., Memphis**—Ditch—Wyaconda River D.D. No. 2, Scotland Co., let contract ditch, involving 156,000 cu.yd. excav., to L. E. Sternberg, Creston, Ia. Noted Nov. 8.

★**Tracy, Cal.**—Irrigation—Bd. Dir. West Side Irrigation Dist. let contract pumping plant, to Lindgren Co., Monadnock Bldg., San Francisco. About $25,789.

INDUSTRIAL WORKS

Proposed Work

Conn., Waterbury—Mattatuck Mfg. Co., East Main St., had plans prepared by Aberthaw Constr. Co., archts., 27 School St., for 4-story factory. G. E. Judd, secy. and treas.

N. Y., Astoria—Astoria Consumers Ice Co. had plans prepared for 95 x [illegible] ft. ice manufacturing plant on 17th St. About $60,000.

N. Y., Astoria—Hunoff Machine Wks., 45 Mills St., having plans prepared by M. J. Harrison, archt., World Bldg., New York City, for 1-story machine shop. About $25,000.

N. Y., Brooklyn—P. Abbott Constr. Co., 180 Montague St., had plans prepared by S. Millman & Sons, archts., 780 Pitkin Ave., for 1-story, 131 x 152-ft. brick garage, on Ocean Ave. About $85,000.

N. Y., Brooklyn—E. W. Bliss Co., Adams and Plymouth Sts., had plans prepared by W. Pfaendler, Ordnance Dept., foot 53rd St., for 6-story, brick and steel factory.

N. Y., Brooklyn—C. Hartman Co., 985 Deane St., has increased its capital stock from $10,000 to $80,000 and plans addition to factory.

N. Y., Brooklyn—F. Jiancarlo, 1470 67th St., had plans prepared by F. Savignano, archt., 6005 15th Ave., for 1-story, 72 x 100-ft. concrete garage on 60th St. About $35,000.

N. Y., Buffalo—Kellog Prodocts Co., 98 Delaware Ave., had plans prepared, 2-story, 32 x 64-ft. transformer house, 2-story, 30 x 112-ft. boiler house, 1-story, 50 x 57-ft. addition to boiler house and 3-story, 52 x 73-ft. packing house. About $40,000. R. J. Reidpath, Builders' Ex., archt.

N. Y., Buffalo—O'Neil Iron Wks., Perry St., has increased its capital stock to $500,000 and plans to build addition to plant.

N. Y., Long Island City—Astoria Light, Heat & Power Co., 130 East 15th St., New York City, had plans prepared for 1- and 4-story, 101 x 151-ft. grinding factory on Winthrop Ave. About $25,000. W. H. Bradley, pres.

N. Y., Long Island City—Ice Mfg. Co., 1480 Bway., New York City, had plans prepared by Mortensen & Co., archts., 405 Lexington Ave., New York City, for 1-story, 45 x 141-ft. ice plant and garage, Packard Pl. and Dreyer Ave. About $35,000.

N. Y., New York—American Stove Co., 209 West 43rd St., has increased its capital stock from $7,000,000 to $10,000,000, and plans to build addition to plant.

N. Y., New York — Standard Concrete Machinery Co., 233 Bway., has increased its capital stock from $100,000 to $250,000 and plans to build addition to plant.

N. Y., New York—Toch Screw Machine Products Corp., 8th St., has increased its capital stock from $50,000 to $100,000, and plans to build addition to plant.

N. Y., New York—P. Weinstein & Sons, 1397 Stebbins Ave. having plans prepared by I. Margan, archt., 372 East 149th St., 4-story, 100 x 100-ft. addition to garage, (Bronx Boro.). About $135,000.

N. J., Camden—Columbia Bronze Foundry Co., 529 Columbia Ave., has increased its capital stock from $10,000 to $200,000 and plans addition to plant.

N. J., Trenton—Standard Oil Co. acquired additional land on New York Ave. here, and plans to build several additions to its plant.

N. J., Wharton—Wharton Steel Co. will increase its capital stock from $3,000,000 to $10,000,000 and plans to build additions to its plant here.

Pa., Butler—Spang & Co., Etna St., plans 1- and 2-story, 170 x 250-ft. addition to its plant. About $150,000.

Pa., Groveton—Lewis Foundry & Machine Co. has increased its capital stock from $210,000 to $1,000,000 and plans addition to plant.

Pa., Johnstown — Flood City Mfg. Co., Elder and Messenger Sts., has increased its capital stock from $15,000 to $100,000, and plans 4-story, 100 x 120-ft. concrete and steel addition to factory. J. L. Hershberger, Southmont, genl. mgr.

Pa., Phila.—Main Belting Co., 1219 Carpenter St., had plans prepared for 3-story addition to plant.

Industrial Works (Continued)

Pa., Phila.—A. Schoenut & Co., had plans prepared for 1-story, 58 x 141-ft., 40 x 89-ft., and 21 x 89-ft. lumber yard and kiln building. About $50,000. A. P. Schoenhut. Adams and Cepviva Sts., pres. Ballinger & Perrot, 17th and Arch Sts., archts., soon let contract.

Pa., Phillipsburg—Atlantic Refining Co.. 3144 Passyunk Ave., Phila., having plans prepared by C. H. Ehler, archt., c/o Phila. office, for 4-story, 100 x 200-ft. oil storage warehouse. About $200,000. C. Metz, Phillipsburg, supt. constr.

Pa., Stealton—John Hoffer Flour Mill Co. soon lets contract rebuilding 5-story, 50 x 70-ft. brick mill recently destroyed by fire. E. E. Hollenbach, Brandwyne St., Phila., archt.

Md., Baltimore—L. Raast, 2340 Eutaw Pl., plans to build 2 and 3 story, 80 x 45 and 80 x 40 ft. brick and concrete warehouses, at 1540 Ridgely St. Abaut $22,000 and $30,000 respectively. Callis & Callis, 2055 Kennedy Ave., archts.

Va., Lynchburg—Lynchburg Foundry Co. plans to build 1-story foundry. About $60,000. Wiley & Wilson, engrs.

Va., Narrows—Union Tanning Co., Narrow, plans to rebuild plant recently destroyed by fire. Loss, $200,000.

W. Va., Huntington—Jeffrey-Dewitt Co., Butler St. and Grand Trunk R.R., Detroit, Mich., plans to build factory here. About $100,000.

N. C., Lexington—Peacock Furniture Co. plans rebuilding furniture factory recently destroyed by fire with $60,000 loss.

Fla., Tampa—Oscar Daniels Shipbuilding Co., Woolworth Bldg., New York City, has leased shipyards of Tampa Shipbuilding & Eng. Co., and plans to build several large additions to same.

Ala., Birmingham—Indian Refining Co.. 1320 Ave. E, plans rebuilding concrete warehouse and plant which was destroyed by fire. About $100,000. F. A. Chapman, mgr.

Ky., Solvay—Kentucky Solvay Co., controlled by Semet-Solvay Co., Milton Ave., Syracuse, plans to increase its capital stock from $2,700,000 to $5,200,000 and plan addition to plant.

O., Cincinnati — Cincinnati Terminal Warehouse Co., soon lets contract 7-story, freight terminal and warehouse in site enclosed by Central Ave., Smith St. and from Front to Augusta St. Plans include laying 4 tracks covering area 175 x 750 ft. and running entire length of terminal. A. M. Allen & Co., Cincinnati, engrs.

O., Cleveland—Cleveland Gear Grinding Co., recently incorporated with $350,000 capital stock, plans to build factory in East 152nd St. Dist.

O., Cleveland—Viehek Tool Co., Quincy Ave., plans to build 3-story addition to plant.

O., Cleveland — Woodland-55th St. Co., 630 Cuyahoga Bldg., plans to build brick and concrete garage, 5700 Woodland Ave. About $25,000.

O., Columbus—Blue Valley Creamery Co., 702 South Clinton St., Chicago, had plans prepared for 3-story brick factory on Grove St. About $50,000. Noted Nov. 15.

O., Mansfield—Phoenix Electric Co. plans 1-story, 100 x 500-ft. factory. Althause & Jones, archts., 204 Market Bldg., soon let contract.

Ind., Ft. Wayne—City having plans prepared by Mahurin & Mahurin, archts., 124 West Jefferson St., for addition to lighting plant. About $35,000.

Ind., Hammond—Standard Steel Car. Co. plans to build several large additions to its plant here. Company recently received $60,000,000 contract from U. S. Government for gun parts.

Mich., Detroit—Amer. Car & Fdry. Co. having plans prepared for 1-story paint shop. About $50,000. J. H. Ames, 445 East Ferry St., engr.

Ill., Chicago—Bunte Bros., 730 West Monroe St., have leased 14-acre site at Franklin Blvd. and Ohio St., and plans rein.-con. factory. About $1,500,000.

Ill., Chicago—L. Pfaelzer & Son, 3927 South Halsted St., soon let contract, 2-story, 51 x 109-ft. abbattoir. About $80,000. Packers' Architectural & Eng. Co., 431 South Dearborn St., archts. and engrs.

Ill., Lincoln—Langellier Motor Co., 112 South McLean St., had plans prepared by Deal & Ginzel, archts., 209 Independent Order of Odd Fellows Bldg., for 30 x 138-ft. garage and salesroom. About $30,000. O. L. Langellier, mgr.

Ill., South Chicago—Iroquois Iron Co., having plans prepared by C. D. Rawstorne, archt., 122 South Michigan Ave., for 1-story slag handling plant. About $100,000. E. Raum, 3267 East 95th St., secy.

Wis., Menominee Falls — Standard Oil Co., 16th and Grand Ave., Milwaukee, plans to build 2-story garage here. About $50,000. Leiser & Hoist, 402 Germania Bldg., Milwaukee, archt.

Wis., Osseo—Oatman Condensed Milk Co., 327 North Jefferson St., Chicago, soon receives bids for 2-story, 100 x 225-ft. brick and steel condensory.

Ia., Burlington—G. G. Higbee, Washington and Central Aves., plans to build 77 x 106-ft. concrete corliss shop. About $50,000. W. F. Weibley, Tama Bldg., archt.

Ia., Burlington—Iowa Soap Co., 816 Valley St., plans 5-story, 40 x 42-ft. rein.con. factory. About $55,000. F. M. Smith. pres. W. F. Weibley, Tama Bldg., archt.

Ia., Davenport—Armour & Co., 105 Rock Island Ave., purchased site on Front St. and plans to build rein.-con. and steel addition to its plant. About $135,000.

Minn., Rochester—J. C. Thompson plans 2-story, 76 x 140-ft. garage here. About $30,000. F. H. Moose, archt.

Kan., Wichita—Cudahy Packing Co., 14th and Jones Sts., Omaha, Neb., plans to build plant on newly acquired 60-acre tract of land. About $500,000.

Neb., Omaha—C. W. Calkins, City Natl Bank Bldg., soon lets contract, 1-story, 100 x 132-ft. garage. About $30,000. J. T. Allen, Brandeis Theater Bldg., archt.

Wyo., Cheyenne—Union Pacific R.R. plans to build additions to its shops here. About $1,600,000. R. L. Huntley, 15th and Dodge Sts., Omaha, Neb., ch. engr.

Mo., St. Louis—M. A. Burdeau, 16 Hortense Pl., soon lets contract, 1-story, 50 x 135-ft. garage and sales building. About $60,000. P. J. Bradshaw, 512 International Life Bldg., archt.

Tex., Grand Saline—Grand Trunk Saline Salt Co. plans to rebuild its plant, recently destroyed by fire. About $41,500.

N. M., Tucumcari—D. F. Thomas, Tucumcari, and associates plan to build 125-ton oil flotation mill here. About $30,000.

Ariz., Tuscon—Tuscon Warehouse & Transfer Co. having plans prepared by W. Curlett & Son, archts., Merchants Bank Bldg., Los Angeles, for 4-story, 66 x 66-ft. rein.-con. warehouse. About $40,000.

Cal., Fresno—Western Meat Co., 744 P St., having plans prepared for addition to plant. About $90,000.

Cal., Hanford—Cousins Tractor Co., recently incorporated with $100,000 capital stock, plans to build factory on East 7th St. H. R. Cousins, S. McCord, Hanford, and A. D. Ferguson, Fresno, among incorporators.

Cal., Hanford—Kings County Packing Co. plans to build 80 x 100-ft. addition to cannery. About $35,000.

Cal., Los Angeles—Amer. Can Co., 4801 Sante Fe St., plans to build new can factory and warehouse; also lay sufficient tracks to hold 61 freight cars. About $1,000,000.

Cal., Sacramento—California Prune & Apricot Growers, Inc., plans to build 4-story packing plant. About $160,000.

Cal., Sacramento—Southern Pacific Co. plans building steel manufacturing and switch plant. W. Hood, Flood Bldg., San Francisco, ch. engr. About $565,000.

Cal., San Francisco — Cathering Dunne Co. plans to build 2-story lithographing plant on Folsom St. About $35,000.

Cal., San Francisco—Natl. Paper Prod. Co., 534 Battery St., plans 2-story, 300 x 800-ft. factory. About $400,000. MacDonald & Kahn, engrs.

Ont., Weston—K. & S. Canadian Tires Ltd., 527 Yonge St., Toronto, plans building 70 x 150-ft. factory here. About $60,000.

BIDS DESIRED

N. Y., Albany—(Official)—Until Dec. 11 by W. W. Wotherspoon, supt. pub. wks., Capitol, building freight sheds and headhouse on Pier 6, East River, Terminal Contract No. 207; advertised in this issue

N. Y., Syracuse—Until Dec. 10, by Starrett & Van Vleck, archts., 8 West 40th St., New York City, for 3-story, 93 x 240-ft. rein.-con. warehouse on Willis Ave., here, for Church, Dwight & Co., 27 Cedar St., New York City. About $100,000. Noted Nov. 29.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Maynard—Assabet Mills, Maynard & Shawmut Bank Bldg., let contract, 5-story, 50 x 400-ft. addition to E. W. Pitman Co., Bay State Bldg., Lawrence. Percentage basis.

★Conn., Hartford—Pratt & Cady, Inc., 556 Capitol Ave., let contract, 3-story, 35 x 100-ft. addition, to Porteus Walker Co., Inc., 13 Forest St.

★N. Y., Buffalo — National Analine & Chemical Co., 351 Abbott Rd., let contract 3-story, 80 x 122-ft. brick factory, at 140 Lee St., to J. W. Cowper Co., 724 Fidelity Bldg., $88,500.

★N. Y., Morristown—Hires Condensed Milk Co., 913 Arch St., Phila., let contract 3-story, 60 x 80-ft. factory, to Thompson & Binger Co., 280 Madison Ave., New York City. About $85,000.

★N. Y., New York—E. Greenbaum & Co., 349 East 103rd St., let contract, 3-story, 50 x 93-ft. addition to packing plant, to Lustbader Constr. Co., 103 Park Ave., $75,000.

★N. J., Bloomfield—International Arms Co. let contract 1-story, 240 x 600-ft. rein.-con. and steel munition factory, to Amer. Concrete Steel Co., 27 Clinton St., Newark.

★N. J., Camden—Evanson & Levering, 217 Atlantic St., let contract, 1-story, 110 x 240-ft. rein.-con. and steel addition to plant, to G. Kessler Contg. Co., Drexel Bldg., Phila. About $45,000.

★N. J., Newark—Bonnell Motor Car Co., 520 Broad St., let contract, 1-story, 112 x 200-ft. garage and service station to Becker Constr. Co., 361 Grove St., $50,000. Noted Nov. 29.

★N. J., Perth Amboy—Natl. Synthetic Co. let contract building 3 additions to chemical plant here, to Tullis & Blanchard, 326 East 42nd St., New York City. About $75,000.

★N. J., Yardville—Zee Zee Rubber Co., Yardville, let contract, 2-story, 50 x 160-ft. factory, to Martin Bros., Yardville, $25,000.

★Pa., Erie—Amer. Brake Shoe & Fdry. Co., 1305 West 12th St., let contract 1- and 2-story, 150 x 650 ft. addition to plant, to Crowell, Lundoff-Little Co., 1951 East 57th St., Cleveland, O. About $350,000.

★Pa., Phila.—Hulton Printing Processing & Dyeing Co., 3851 Frankford Ave., let contract 1-story, 75 x 210-ft. brick and concrete machine shop and storage plant on Coral St., to F. Crompton & Bro., 4614 Oakland St., Frankford. About $25,000.

★Pa., Phila.—F. A. Poth & Sons, 31st and Jefferson Sts., let contract 1-story, 44 x 50-ft. power house, to C. H. Casper, 925 Chestnut St. About $100,000. Noted Oct. 4.

Pa., Phila.—Phila. & Reading Ry. received low bid building engine house and machine shop, Tulip and Emerald Sts., from Wm. Steele & Sons Co., 30 South 15th St., Phila. About $323,517. Noted Nov. 22.

★Md., Baltimore—Amer. Propeller & Mfg. Co., 233-49 East Hamburg St., let contract 1-story, 150 x 200-ft. factory on Key Highway, to Price Constr. Co., Maryland Trust Bldg. About $60,000.

★Va., Lynchburg—Jobbers Overall Mfg. Co., 1701 12th St., let contract, 3-story, addition to factory, to C. W. Hancock & Sons, 1000 Church St., $60,000. Noted May 17.

★Ala., Attilla—Tubular Bucket Mfg. Co. let contract 1st unit, 60 x 220-ft. of new can manufacturing plant here, to Attilla Investment Co., Attilla.

Industrial Works (Continued)

★**O., Cleveland**—Ideal Tire & Rubber Co., 325 Guardian Bldg., let contract, 3-story, brick and steel factory, Warner Rd., to Hunkin-Conkey Constr. Co., Cuyahoga Bldg.

★**O., Cleveland** — Manufacturers Brush Co., 1758 West 45th St., let contract brick factory, 1554 West 114th St., to Hailsbauer & Krelschrer, 7945 Lorain Ave., $25,000.

★**O., Cleveland**—National Lamp Co., let contract building 72 x 186-ft. garage at Nola Park plant, Noble Rd., to S. W. Emerson Co., 1900 Euclid Ave., $30,000.

★**O., Elyria**—Elyria Machine Co. let contract 1-story, 60 x 300-ft. foundry and machine shop, to Austin Co., 14220 Euclid Ave., Cleveland. About $35,000.

★**O., Ironton**—Ironton Portland Cement Co., Masonic Temple, let contract building coal grinding and potash recovery plants to W. C. Barstow & Co., 50 Pine St., New York City.

★**Ind., Miller** — International Airship Corp., 527 Bway., Gary, let contract, 1-story, 199 x 600-ft. airship factory and power house, to N. P. Severin, 105 North Clark St., Chicago, $200,000. Noted Sept. 13.

★**Ill., Chicago**—A. M. Castle Co., 1300 North Branch St., let contract, 1-story, addition to warehouse, to C. Rasmussen, 154 Randolph St., $50,000.

★**Ill., Chicago**—Union Special Machine Co. let contract 8 story, 100 x100 ft. concrete factory, West Kinzie and Franklin Sts., to G. A. Fuller Co., 140 South Dearborn St. About $125,000. Noted Nov. 22.

★**Wis., Jamesville**—Chas. Skid Mfg. Co., Jamesville, let contract, 1-story, 50 x 150-ft. addition to factory, to A. Summers & Son, Jamesville. About $70,000.

★**Ia., Ft. Madison** — Perfection Tire & Rubber Co., building 3-story, 60 x 250-ft. tire plant by day labor. About $80,000. F. E. Humphrey, Fostoria Ave., mgr.

★**Minn., Minneapolis** — William Bros. Boiler & Mfg. Co., let contract, 193 x 298-ft. addition to warehouse, to A. Cederstan Co., Central and 3rd Aves., $40,000.

★**Kan., Wichita**—Wichita Flour Mill Co., 17th and Santa Fe St., let contract flour mill addition to Lehrack Eng. and Contg. Co., 725 Gloyd Bldg., Kansas City, Mo. About $150,000.

★**Utah, Provo** — Goddard Packing Co., 20th St. and Lincoln Ave., Ogden, let contract packing plant here, to Valladson Bros., Dooly Bldg., Salt Lake City. About $75,000.

★**Cal., Alameda**—Union Iron Works let contract building machine shops, to W. E. Duncan & Co., Sharon Bldg., San Francisco. $140,115. Noted Apr. 12.

BUILDINGS

Proposed Work

Mass., Brookline — (Official) — Church—Christian Science Benevolent Assn. having plans prepared by C. T. McFarland, archt., 162 Newbury St., Boston, building group of buildings on 20-acre tract on Single Tree Hill. F. H. Anderson, 236 Huntington Ave., Boston, will supervise construction.

Conn., Bridgeport—Church—St. Stephen's Congregation having plans prepared by J. A. Jackson, archt., 1123 B'way., New York City, 70 x 130-ft. About $75,000. S. Chemitzky, rector.

N. Y., Brooklyn—Institute—Brooklyn Institute of Arts and Sciences had plans prepared for buildings F and G. About $120,900. A. A. Hely, Academy of Music Bldg., pres. bd. trustees. McKim, Mead & White, 101 Park Ave., New York City, archt.

N. Y., New York—Hotel—Hamilton Hotel Corp., c/o E. Ellinger, 30 Church St., had plans prepared by Schwartz & Gross, archt., 347 5th Ave., 15-story, 100 x 133-ft. About $400,000.

N. Y., New York—Kitchen—Dept. Pub. Charities, Municipal Bldg., had plans prepared by D. Barber, archt., 101 Park Ave., 1-story, 54 x 116-ft. kitchen building No. 65. About $65,000. J. A. Kingsbury, comr.

N. Y., Rochester—Church—Salem Evangelical congregation, 435 Mt. Hope Ave., plans addition to church. About $148,000.

N. J., Ocean City—(Official)—Theater—Stores, etc.—H. E. Wendell, archt., 431 Central Ave., lets contract about Jan. 1, for 80 x 250-ft. theater, 2-story, 75 x 125-ft. observation and dance pavilion, 2-story, 75 x 125-ft. stores, 50 x 407-ft. bath house, frame concrete construction, and 2-story, 50 x 100-ft. brick swimming pool; also 125 x 400-ft. concrete piling and concrete girders, ocean pier; owners, Park Amusement Co., Inc. About $225,000. Noted Nov. 29.

Pa., Lititz—Bank—Lititz National Bank, 40 East Main St., having plans prepared by C. E. Urban, archt., Woolworth Bldg., Lancaster, 1-story, 65 x 75 ft. About $90,000. E. H. Snyder, cashier.

Pa., Phila.—Art Gallery—City having plans prepared. About $2,000,000. T. Booth Smith, Mayor.

Pa., Pittsburgh—Bank—Union Trust Co., 337 4th Ave., having plans prepared by E. P. Mellon and Trowbridge & Livingston, archts., Phila., 4-story. About $1,000,000.

Md., Baltimore—Hospital—G. W. DeHoff, M. D., 2020 North Charles St., c/o Baltimore Homeopathic Hospital plans. About $150,000. W. Gieske, 65 Gunther Bldg., archt.

Md., Baltimore—Theater—H. W. Webb, Fidelity Bldg., c/o Parkway Amusement Co., had plans prepared for 2-story, 83 x 125-ft.. About $150,000. O. D. Wight, archt., Munsey Bldg., soon lets contract.

Va., Petersburg—Hotel—Petersburg Investment Corp., plans 5-story addition. About $100,000. W. A. Joggy, Mechanics Bldg., pres. C. M. Robinson, Times Dispatch Bldg., Richmond, archt.

La., Monroe—Court House and Jail—See "Streets and Roads."

Ky., Lynch—Office—United States Coal & Coke Co. soon lets contract. About $100,000. J. T. Franklin, Benham, mgr.

O., Dayton — Theater—G. Burrows and associates plan to rebuild theater recently destroyed by fire. About $250,000. Pretzinger & Musselman, 1155 Reibold St., archts.

O., East Cleveland—(Cleveland P. O.)—Hospital—City soon lets contract, 3 and 4-story, 88 x 250-ft. About $200,000. Address W. M. Pattison, 777 Rockwell Ave. W. Hirsh, 1303 Swetland Bldg., Cleveland, archt.

O., Youngstown — Schools — Bd. Educ. plans. About $300,000.

Mich., Detroit — Terminal — Detroit, Toledo & Ironton R.R. acquired 76 acres land here and plans to build terminal. About $1,000,000. T. Groner, Springfield, O., ch. engr.

Mich., Muskegon — Hospital — Sisters of Mercy, Mt. Mercy Home, West Bridge St., Grand Rapids, having plans prepared by Briemaier & Son, archt., 41 University Bldg., Milwaukee, Wis. About $150,000.

Ill., Chicago—Hotel—A. Pick & Co., 212 West Randolph St., plans 84 x 90-ft., Madison and Market Sts. About $600,000.

Ia., Davenport—Schools—City plans election Dec. 10 to vote on $400,000 bond issue to build 3 intermediate ward schools.

Ia., Des Moines—Office—Iowa Realty & Investment Co., plans 3-story, 50 x 60-ft., brick and concrete. About $70,000. C. R. Graham, 410 East 5th St., pres.

Ia., Sioux City—Office—Davidson Realty Co., Davidson Bldg., plans 9-story, brick. About $75,000.

Ia., Story City—School—City voted $50,000 bonds to build school. E. E. Sevaried, secy. bd. educ. Noted Oct. 25.

Minn., Duluth—School—Bd. Educ. plans to build Munger School, 13th St. and 8th Ave. About $120,000. Croft & Boerner, 301 Palace Bldg., Minneapolis, archts.

Minn., Minneapolis — Office — Farmers' Investment Co., Minneapolis, plans, 50 x 60-ft. brick. About $50,000. C. S. Vojta, Silver Lake, pres.

Minn., Minneapolis—School — All Saints Congregation plans 2-story, 66 x 166-ft. rein.-con., 5th St. and 5th Ave., N.E. About $75,000. V. Cordelia, 518 Kasota Bldg., archt.

Kan., Pittsburgh—Hospital—G. W. Van Meter, archt., 504 Caldwell-Murdock Bldg., receives bids about Jan. 1, building 3-story, brick and rein.-con. addition to Mt. Carmel Hospital. About $100,000. Noted Oct. 25.

Kan., Wichita—Forum—City having plans prepared by L. Schmidt, archt., 121 North Market St., for addition to forum building. Cost, about $250,000; $14[illegible],000 now available for work.

Kan., Wichita—Office—Wichita Bldg. & Investment Co. having plans prepared 10-story, 18-26 North Market St., about $1,000,000. D. Marshall, Palace Theater Bldg., pres.

Neb., Omaha—Court House—City plans 3-story, 60 x 89-ft. brick and rein.-con. About $130,000. W. F. Gernandt, 437 Keeline Bldg., archt.

Neb., Omaha—Hotel and Office — Home Builders, Inc., Brandeis Theater Bldg., plans 7-story, 110 x 120-ft. brick and rein.-con. About $300,000. J. T. Allan, 224 Brandeis Theater Bldg., archt.

Neb., Omaha—Office and Service Station—Nebraska Storage Battery Co., 2203 Farnam St., plans 2-story, 95 x 132-ft. rein.-con. About $50,000. J. and A. McDonald, 905 Omaha Natl. Bldg., archt.

Neb., Omaha—Office and Store—Heatt Realty Co., 245 Omaha Natl. Bank Bldg., plans 3-story, 66 x 132-ft. brick and rein.-con. About $52,000. J. T. Allan, 324 Brandeis Theater Bldg., archt.

Mo., Bowling Green—Sanitorium, Hotel, etc.—Bowling Green Mineral Springs Co. having plans prepared by Barnett, Haynes & Barnett, archts., 949 Century Bldg., St. Louis, for sanitorium, hotel, water-works and bottling plant. About $100,000. C. E. Still, M. D., Kirksville, pres.

Mo., St. Louis—Hospital—Missouri Pacific R.R. having plans prepared by C. H. Wray, archt., Rialto Bldg., 6-story, brick and stone. About $300,000. E. A. Hadley, St. Louis, ch. engr.

Mo., St. Louis—Hotel—N. Cole Investment Co. having plans prepared by N. B. Howard, archt., Century Bldg., 3-story, brick and stone. About $1,000,000.

Mo., St. Louis—Hotel, Theater and Store—Liberty Realty Co., c/o R. H. Cole, having plans prepared by N. B. Howard, archt., 943 Century Bldg. About $1,700,000.

Mo., St. Louis—See "Industrial Works."

Ark., Camden—High School—Bd. Educ. plans. About $100,000. T. M. Sanders, Little Rock, archt.

Colo., Sterling — High School — School Dist. having plans prepared by E. G. Groves, archt., 222 Foster Bldg., Denver, 2-story, 168 x 200-ft. About $60,000.

N. M., Silver City — Court House — City having plans prepared by Trost & Trost, archts., El Paso, Tex. About $250,000.

Ont., Windsor—School—School Bd. plans to erect new school. About $100,000. A. G. Roberts, Labelle Bldg., chn. bldg. com.

BIDS DESIRED

Mass., Wellesley — Art Buildings—Until Dec. 12, by Trustees Wellesley College, 3-story, 70 x 135-ft. Day & Klauder, Chestnut St., Phila., archts. Noted July 19.

N. Y., New Hampton—(Official)—Laundry, etc.—Until Dec. 12, by B. G. Lewis, comr. correction, Municipal Bldg., New York City, building laundry and storage buildings, cubicle dormitory and industrial buildings at New York City Reformatory.

N. Y., Syracuse—School—Until Dec. 10, by Bd. Educ. rebuilding Porter School, 2- and 3-story. About $150,000. G. Wright, Union Bldg., archt.

O., Akron—School—Until Dec. 10, by Bd. Educ. building 2- or 3-story. About $500,000. F. L. Packard, 1212 Hayden Bldg., Columbus, and T. R. Ridley, Akron Savings and Loan Bldg., archts. Noted July 12.

O., Cleveland—School—Until Dec. 24, by clk. Bd. Educ., Rockwell Ave. and East 6th St., for completion of North Doan School Annex. About $100,000.

O., East Cleveland—(Cleveland P. O.)—(Official)—High School—Until Dec. 17, by C. Ammerman, clk. bd. educ. building Shaw Technical High School, brick. W. H. Nicklas, 1900 Euclid Ave., Cleveland, archt.

Industrial Works (Continued)

O., Kenmore—(Official)—High School—Until Dec. 17, by I. W. Fiscus, clk. bd. educ., 2-story, 75 x 130 ft., on North 15th St. About $125,000. M. P. Lauer, 707 Peoples Bank Bldg., Akron, archt. Noted Nov. 1.

O., Oxford—(Official)—Chemistry—Until Dec. 23, by Bd. Trustees Miami University, building addition to chemistry building. F. L. Packard, 16 East Broad St., Columbus, archt. Noted Sept. 27.

O., Shaker Heights—(Cleveland P. O.)—(Official)—School—Until Dec. 21, by C. A. Palmer, clk. bd. educ., 2855 Coventry Rd., F. C. Warner, Hippodrome Annex, Cleveland, archt.

Ind., Gary—Hospital—Until Dec. 8, by Schmidt, Garden & Martin, archts., 104 South Michigan Ave., Chicago, building 4-story, hospital for General Hospital Assn. About $150,000. Noted July 26.

Ind., Kokomo — Masonic Temple—Until Dec. 15, by Howard Lodge No. 93, F. and A. M. Bldg., building 4-story, 76 x 95-ft. About $75,000. W. E. Williams, chn. bldg. comn. E. E. Dunlap, 909 State Bldg., Indianapolis, archt. Noted Aug. 9.

Okla., Miami—(Official)—Jail—Until Dec. 17, by Ottawa Co. Comrs. About $50,000. J. A. Walker, co. clk. Noted Nov. 22.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract).

★N. Y., Brooklyn—Club House—Queens Co. Jockey Club, 399 Fulton St., let contract, 3-story, 35 x 88 ft. addition to club house, paddock, and grand stand, Aqueduct Race Track, to H. J. Brown & Sons, 1534 Fulton St., $60,000. Noted Nov. 8.

★N. Y., New York—Office—Smith Valley Realty Corp., New York, let contract, 7-story, 68 x 79-ft. brick, Front St. and Maiden Lane, to W. L. Crow Constr. Co., 103 Park Ave. About $250,000.

N. J., Red Bank—School—Bd. Educ. let contract 2-story, 75 x 123-ft. brick and terra cotta, to H. H. Moore, 3rd Ave., Spring Lake, $100,000. Noted Nov. 8.

★Pa., Harrisburg—Junior High School—Bd. Educ. let contract, 4-story, stone and granite, to A. Wildman, 2206 North 3rd St., $300,000. Noted Nov. 15.

★Pa., Pittsburgh—Theater—J. Baziotes and P. Antonoplos, 318 5th Ave., c/o Olympic Theater, let contract, 3-story, 60 x 110-ft. addition and alteration to J. Eichleay, Jr. Co., 20th and Wharton Sts., $50,000.

Miss., Gulfport — City received low bid building emergency hospital, from J. Griffith & Sons Co., 112 West Adams St., Chicago. About $99,000.

★O., Cleveland—Office—Kirk-Latty Mfg. Co., Madison Ave., N. W., and 84th St., let contract, 2-story office and shipping building, to A. Rutherford Co., 2160 East 18th St. About $60,000.

★O., Cleveland—School — Bd. Educ. let contract addition to Rice School to Drummond & Miller Co., Guardian Bldg. About $115,000. Noted Nov. 15.

★O., Lakewood—Schools—Bd. Educ. let contract building 2 schools, Clifton Blvd. and Bunte Rd., to Cleveland Fireproofing Constr. Co., 412 Ainsfield Bldg., $51,243 and $57,838, respectively.

★O., Sandusky—Hotel—D. Olmsted, New Hotel Olmstead, Cleveland, let contract, 6-story, 75 x 132-ft., rein.-con. and steel, Columbus Ave. and Water St., to H. L. Stevens Co., East 9th St., Cleveland. About $200,000.

★Ind., Terre Haute—Theater, Store, and Office—Bankers & Merchants Theatrical Assn., 907 Terre Haute Trust Bldg., let contract, 1 and 2-story, 85 x 130 ft., to J. Wacker, 207 Chamber of Commerce Bldg., Indianapolis, $85,000.

★Ia., Des Moines—Hotel—J. E. Tone and associates, let contract, 12-story, rein.-con., to H. L. Stevens Co., 910 South Michigan Ave., Chicago. About $1,000,000.

Minn., St. Paul — High School — Bd. Educ. received lowest bid building Bay View High School, from E. R. Kiesslich, 456 40th St. About $87,670.

FEDERAL GOVERNMENT WORK

Proposed Work

Me., Caribou—Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Nov. 20. Same were in excess of appropriation. Noted Nov. 29.

Wash., D. C.—Buildings—War Dept., (N. D. Baker, secy.), soon lets contract building 50 additional buildings at Walter Reed Army Hospital here, temporary wood construction.

Ariz., Leupp—Bridges—Cato Sells, comr. Indian affairs, Wash., D. C., rejected bids opened Oct. 25, building 2 steel bridges. Noted Nov. 1.

BIDS DESIRED

Pa., Sunbury—Post Office—Until Jan. 28, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Wash., D. C.—Buildings—Until Dec. 10, by Bureau Yards and Docks, Navy Dept., Wash., reconstructing building No. 105 at Navy Yard. Former bids rejected. Noted Nov. 1.

Wash., D. C.—Generating Sets — Until Dec. 12, by Dist. Comrs. furnishing 2 electric generating sets for use at Home for Aged and Infirm.

Wash., D. C. — Motor Generator Sets—Until Dec. 17, by Bureau Yards and Docks, Navy Dept., Wash., furnishing and delivering 300 kw. motor generator sets and switchboards at various navy yards as follows: 2 at New York, 4 at Phila., 4 at Norfolk, Va., and three 500 kw. generator sets at Wash., D. C. Noted Nov. 22.

Wash., D. C.—Seaman Gunner's Quarters—Until Dec. 17, by Bureau Yards and Docks, Navy Dept., Wash. About $150,000.

Wash., D. C.—Sewerage System, Water Supply Intake and Reservoir—Until Dec. 26, by Cato Sells, comr. Indian affairs, Wash., for installing in Ute Mts., Colo.

La., Grande Isle—Buildings—Until Jan. 4, by E. P. Bertholf, capt. commandant, U. S. Coast Buard, Wash., D. C., for new building and accessories for Coast Guard Sta. No. 214, Barataria Bay. Noted Nov. 22; advertised in this issue.

La., New Orleans—Stone—Until Dec. 11, at U. S. Engr. Office, Custom House, New Orleans, furnishing and delivering stone for Head of Passes and Southwest Pass, Mississippi River; advertised in this issue.

Kan., Eldorado—Post Office—Until Jan. 7, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Okla. ,Shawnee—Post Office—Until Jan. 7, by J. A. Wetmore, superv. archt., treas. dept., Wash.

Okla., Shawnee—Steam Heating System—Until Dec. 27, by Cato Sells, comr., Indian affairs, Wash., D. C., installing here.

Cal., San Francisco — Dredging — Until Dec. 19, by U. S. Eng. Office, 401 Custom House, San Francisco, dredging in Oakland Harbor.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

R. I., Melville—Dredging—Bureau Yards and Docks, Navy Dept., Wash., received only bid dredging at U. S. Naval Depot, Melville Sta., (a) net price per cu.yd. measured in place, for dredging and disposal of all earth, mud and other material not rock, in accordance with Government specifications, (b) price per cu.yd. measured in place for all bowlders excavated and disposed of in accordance with Government specifications, (c) alternate on bidders specifications, from J. S. Packard Dredging Co., 1004 Turks Head Bldg., Providence, R. I., (a) $74 (b) $10 (c) $78 and $10. Noted Nov. 22.

★R. I., Newport—Warhead Storage—Bureau of Yards and Docks, Navy Dept., Wash., let contract building on Rose Island, (work complete), to Darling Slade Constr. Co., Contrs. Bridge, Newport. About $13,458. Noted Nov. 22.

★Conn., New London—Power House and Machine Shop—Bureau Yards and Docks, Navy Dept., Wash., let contract to Evatt Constr. Co., 161 Devonshire St., Boston, Mass. About $171,000. Noted Nov. 29.

★N. Y., Brooklyn—Shipbuilding Ways—Bureau Yards and Docks, Navy Dept., Wash., let contract building shipbuilding ways No. 2 to Jarrett-Chambers Co., 30 East 42nd St., New York City. About $301,998. Noted Nov. 22.

★N. J., Cape May—Garbage Incinerator—Bureau Yards and Docks, Navy Dept., Wash., let contract, to Marse-Boulger Destructor Co., 39 Cortlandt St., New York City, $3987, (award based, on omissions from original bid). Noted Nov. 22.

N. J., Lake Denmark—Fencing—Bureau Yards and Docks, Navy Dept., Wash., received bids Nov. 26, fence and gates at Naval Ammunition Depot (work complete) from Anchor Post Iron Wks., 165 Bway., New York, $47,379; W. A. Snow Iron Wks., Inc., 32 Portland St., Boston, Mass., $50,997; Cyclone Fence Co., Waukegan, Ill., $52,648. Noted Nov. 22.

★Pa., Phila.—Marine Barracks—Bureau Yards and Docks, Navy Dept., Wash., let contract, to McCloskey & Bahl, 1620 Thompson St. About $99,075. Noted Nov. 29.

Pa., Phila.—Reservoir—Bureau of Yards and Docks, Navy Dept., Wash., received bids Nov. 26, Specification No. 2654, 2,000,000 gal. rein.-con. reservoir, at Navy Yard, (work complete) from C. E. Weed, Inc., Albany, N. Y., $45,350; Warren Moore & Co., 13th and Market Sts., Phila., $46,921; E. Fay & Son, 2 South Mole St., Phila., $49,726. Noted Nov. 8.

★Pa., Phila.—Sprinkling System — Bureau Yards and Docks, Navy Dept., Wash., let contract, to General Fire Extinguisher Co., 275 West Exchange St., Providence, R. I., $9496. Noted Nov. 22.

Md., Annapolis—Floating Derrick Hull—Bureau of Yards and Docks, Navy Dept., Wash., received bids, Specification No. 2628, building at Naval Academy, (net price for hull with accessories complete), from Continental Shipbuilding Corp., 29 Bway., New York City, $9500; Elkton Mfg. Co., Elkton, Md., $17,257.

★Md., Indian Head — Artesian Wells — Bureau of Yards and Docks, Navy Dept., Wash., let contract, at Naval Proving Ground, to E. Christman, Massillon, O. $55,685. Noted Nov. 29.

Md., Indian Head—Extension to Power House—Bureau Yards and Docks, Navy Dept., Wash., received only bid building extension to power house, (work complete), from Dawson Constr. Co., May Bldg., Pittsburgh, $39,000. Noted Nov. 29.

★Wash., D. C. — Alterations to Office Building—J. A. Wetmore, superv. archt., treas. dept., let contract for alterations to building at 500-508 4th St., N.W. to F. L. Wagner, 1413 H St., N.W. About $55,400. Noted Nov. 29.

★Wash., D. C.—Brass Foundry—Bureau Yards and Docks, Navy Dept., Wash., let contract, to A. C. Moses, 916 New York Ave., $281,507.

Wash., D. C.—Cranes—Bureau Yards and Docks, Navy Dept., Wash., received only bid furnishing three 50 ton locomotive jib cranes in Norfolk, Va., Phila. and New York Navy Yards, from Penn Bridge Co., Bond Bldg., item 1, net price for 3 cranes complete in accordance with Government specifications, $395,480; item 3, net price 1 electric crane for Norfolk, Government specifications, $124,740, item 5, net price for 1 electric crane for Phila., $124,740; item 7, net price for 1 steam crane, New York, $146,500.

Wash., D. C.—Crane Runways—Bureau Yards and Docks, Navy Dept., Wash., received bids Nov. 30, (a) work complete, Government specifications, (b) steel work complete, including walkway and pipe railing, (c) pipe and concrete foundation complete, including placing of anchor bolts, anchor channels and grillage beams, but not furnishing same, from Ketler-Elliot Eng. Co., 155 North Clark St., Chicago, Ill., (a) $269,752, (b) $165,396, (c) $120,725; Jobson-Gifford Co., 30 East 42nd St., New York City, (a) $222,000, (b) $20,000, (c) $102,000; McClintic Marshall, 1421 Chestnut St., Phila., (b) $109,500; Cranford Paving Co., Union Trust Bldg., (c) $159,000. Noted Nov. 29.

Wash., D. C.—Foundry Extension—Bureau Yards and Docks, Navy Dept., Wash., received bids building at Navy Yard, (a) work complete, (b) price per lin.ft. of piles in place, from Warren, Moore & Co., 12th and Market Sts., Phila., (a) $183,000; Boyle-Robinson Constr. Co., Evans Bldg., Wash., (a) $187,965; (b) $0.45.

Fla., Key West—Filling—Bureau Yards and Docks, Navy Dept., Wash., received only bid building at distant control radio station, net price per cu.yd. filled material in place on basis of Government estimated of 15,000 cu.yd., from W. Gerstle Engr. Co., 198 Bway. New York City; about $1.90 per cu.yd. Noted Nov. 8.

Federal Government Work (Continued)

Wash., D. C.—Grading—Bureau Yards and Docks, Navy Dept., Wash., received bids Nov. 30, grading (a) Adams Mill Rd., (b) 25th St., (c) Q St., (d) Eads St., (e) Mt. View Pl., (f) 17th St., (g) Keokuk St., from Geo. Hyman, 2117 East St., N.W.; (a) $0.64, (b) $0.44, (c) $0.44, (d) $0.75, (e) $0.54, (f) $0.48, (g) $0.60; E. G. Gummel, 36 P St., N.W., (a) $0.79, (b) $0.91, (c) $0.70, (d) $0.80, (e) $1.25, (f) $0.37, (g) $0.37; W. F. Cush, Wash., D. C., (a) $0.89, (b) $0.69, (c) $0.48, (d) $0.62, (e) $0.69, (f) $0.52, (g) $0.57; G. B. Mullen & Co., Wash., D. C., (a) $0.99, (b) $0.44, (c) $0.40, (d) $0.47, (f) $0.53, (g) $0.34.

Wash., D. C.—locomotive Dry-Dock Cranes—Bureau Yards and Docks, Navy Dept., Wash., received only bid furnishing at Norfolk, Va., Phila. and New York Navy Yards, (a) net price for 3 cranes complete in accordance with crane for Norfolk, (c) net price for 1 electrical crane New York Navy Yard from Penn Bridge Co., Bond Bldg., Wash., D. C., (a) $395,480 (c) $124,740. Noted Nov. 22.

Wash., D. C. — Pattern Shop — Bureau Yards and Docks, Navy Dept., Wash., received low bids building at Navy Yards, (a) work complete, (b) amount added or deducted from (a) for one bay, (c) amount added or deducted from (a) and (b) for composition floors in lieu of wood block, (d) added or deducted from (a) and (b) using maple floors in lieu of wood block, (e) using asbestos roofing in lieu of tar and gravel, (f) using air-lock brick partitions in lieu of hollow terra cotta, (g) using glass ceiling light in court, (h) using steel elevator doors, (i) using steel toilet stalls, (j) masic floors in lieu of wood block, (k) omitting lintels, quorins, insets, etc., (l) amount added or deducted from (a) and (b) using sash in 3rd and 4th stories, (m) using solid brick in lieu of air lock, (n) giving office floors coating of coal tar pitch, (o) plumbing complete, (p) heating complete, (q) passenger and freight elevators, (r) electric lights, (s) wood block floors, (t) roof covering, (u) painting, (v) price per sq.ft., footing forms complete, (w) price per cu.yd. concrete footing in place, (x) price per lb. reinforcing steel in place, (y) per cu.yd. plain concrete footings in place, (z) price for piling work per pile, 30 ft. long, as follows:

Warren, Moore & Co., 13th and Market Sts., Phila., (a) $439,830, (b) $21,000, (c) add $800, (d) add $4370, (e) add $1223, (h) add $2245, (j) deduct $200, (v) $0.20, (w) $12, (x) $0.08, (y) $9.

Faribault Bldg. Co., Inc., 52 Vanderbilt Ave., New York City, (a) $442,386, (b) $19,000, (c) add $738, (d) add $600, (e) deduct $600, (f) deduct $1700, (g) add $890, (h) add $3078, (i) add $870, (j) add $4260, (k) deduct $200, (l) deduct $100, (m) add $1000, (n) add $75, (o) $15,800, (p) $22,045, (q) $35,420, (r) $19,800, (s) $18,677, (t) $8400, (u) $2412, (v) $18, (w) $7, (x) $0.0525, (y) $6.25, (z) $5500 each.

A. C. Moses Constr. Co., 816 New York Ave., (a) $447,961, (b) deduct $18,020, add $24,086, (c) deduct $1515, (d) deduct $1138, (e) add $400, (f) $20,350, (g) add $980, (h) add $2250, (i) add $1300, (j) deduct $7042, (l) deduct $1100. Noted Nov. 22.

★Wash., D. C.—Refrigerating Plant and Brine Circulating System—Bureau Yards and Docks, Navy Dept., Wash., let contract to Mayer Ice Machine & Eng. Co., 315 Grant St., Jersey City, N. J., $7700. Noted Nov. 22.

★Wash., D. C.—School — Bureau Yards and Docks, Navy Dept., Wash., let contract building electrical and general school at Hampton Roads, Va., to Harwood & Moss, Silsby Bldg., Newport News, Va. About $297,750.

Wash., D. C.—School—Dist. Comrs. rejected only bid received for building addition to Petworth School. Same was in excess of appropriation. Noted Nov. 8.

Wash., D. C.—Steel Towers—Bureau of Yards and Docks, Navy Dept., Wash., received bids Nov. 26, Specification No. 2568, building two 200-ft. steel towers at Naval Radio Sta., Virgin Isles, West Indies (a) net price per lb. steel (b) net price for lightning protection, from Bedford Fdry. & Machine Co., Bedford, Ind., (a) $0.143 (b) $1.66; Stewart Eng. Corp., 61 Bway., New York City, (a) $0.158, (b) $3.80; Aetna Steel Prod. Co., 1544 Bway., New York City, (a) $0.16, (b) $3500. Noted Nov. 1.

Wash., D. C.—Track Scales—Bureau of Yards and Docks, Navy Dept., Wash., received bids Nov. 26, Specification No. 2593, Item 4, 3 scales, 2 at Navy Yard, Portsmouth, N. H., and 1 at Charleston, W. Va., with modifications as desired by bidder, from Howe Scale Co., 341 Bway., New York City, $12,092; Standard Scale & Supply Co., 1631 Liberty Ave., Pittsburgh, Pa., (alternate bid), $7052; Fairbanks Co., 416 Broome St., New York City, $23,439. Noted Nov. 1.

W. Va., Charleston—Electric Duct System—Bureau of Yards and Docks, Navy Dept., Wash., received bids Nov. 26, Specification No. 2669, building at U. S. Naval Projectile Plant (work complete), from G. E. Eng. Co., Inc., 417 Canal St., New York City, $8988; H. E. Crook Co., Inc., 27 Light St., Baltimore, Md., $12,000. Noted Nov. 8.

N. C., Chapel Hill—Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., received bids Nov. 27, (work complete), from Haynes Bros., Chatham, Va., $43,950, alternate, add $8100; W. J. Brent, Bd. Trade Bldg., Norfolk, Va., $45,573, alternate, $48,131; Dreher Constr. Co., 748 Marquette Bldg., Chicago, $48,184, alternate, add $2400. Noted Oct. 25.

S. C., Charleston—Power Plant Improvements—Bureau of Yards and Docks, Navy Dept., Wash., received bids, Specification No. 2661, (a) work complete, (b) omitting coal bunkers and coal weighing equipment, (c) coal bunkers and coal weighing devices, (d) coal bunkers and alternative traveling coal weighers, from Carroll Electric Co., 714 12th St., N.W., Wash., D. C., (a) $24,700, (b) $110,000, (c) $118,000; Gillis Geoghegan, 537 West Bway., New York City, (a) $119,875; J. W. Danforth Co., Ellicott Sq., Buffalo, N. Y., (a) $130,000, (b) $107,000, (c) $23,350, (d) $19,000. Noted Nov. 15.

La., New Orleans—Radio Buildings—Bureau of Yards and Docks, Navy Dept., Wash., received bids Nov. 26, Specification No. 2649, building at Naval Sta., (a) net price, using brick for receiving building, (b) using wood construction, (c) amount deducted from "a" using wood and fibreboard lath in lieu of metal lath, from J. Thatcher & Son, Henneu Bldg., New Orleans, (a) $17,676; (b) $16,946, (c) $40; Dreher Constr. Co., Chicago, (a) $18,530, (b) $15,500, (c) $25; H. W. Bond & Bro., New Orleans, (a) $18,902, (b) $16,982, (c) $50. Noted Nov. 8.

S. D., Bellefourche—Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., received bids Nov. 28, (a) limestone, (b) sandstone, from J. Lauritzen, Fergus Falls, Minn., (a) $61,990; Wm. O'Neil & Son, Faribault, Minn., (a) $62,640; Eugene Schuler, Pasadena, Cal., (a) $64,000, (b) $66,500. Noted Oct. 11.

Wyo., Buffalo—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received only bid, from W. D. Lovell, 1415 8th St., S.E., Minneapolis, Minn., $61,800. Noted Nov. 1.

Cal., Mare Island—(Vallejo P. O.)—Addition to Boiler Shop)—Bureau Yards and Docks, Navy Dept., Wash., received low bids building addition to boiler shop, Building No. 122, from F. Gallagher, 180 Jessie St., San Francisco, $30,900, 60 days; G. W. Boxton & Son, 1022 Hearst Bldg., San Francisco, $31,900, 180 days; Knowles & Mathewson, 442 Call Bldg., San Francisco, $31,967, 60 days. Noted Nov. 15.

MISCELLANEOUS

Proposed Work

Park Improvements—Key West, Fla.—City voted $60,000 bonds to improve parks.

Garbage Plant—Louisville, Ky. — City plans to build garbage reduction plant. About $325,000. D. B. G. Rose, chn. bd. pub. wks.

Park—Elwood, Ind.—City plans. About $10,000.

Subway — Kankakee, Ill. — City passed ordinance authorizing Illinois Central R.R. to build subway under tracks on Water St. Ordinance provides for 60-ft. opening which will be 14 ft. high where roadway passes and 10 ft. over sidewalk. A. S. Baldwin, 135 East 11th St., Chicago, ch. engr.

Transmission Lines — Lawrence, Kan.—See "Water-Works."

Wharf—Lufkin, Tex.—Lufkin Cotton Co. plans to enlarge wharf capacity to 45,000 ft. J. F. Christian, mgr.

Seawall—Long Beach, Cal.—Craig Shipbuilding Co., Bway. and Water St., plans to build rein.-con. seawall along its plant. About $45,000.

Pile Jetty—Three Rivers, Que.—Wayagamack Pulp & Paper Co., Ltd., Wayagamack Island, plans to build pile jetty. About $30,000. T. Pringle & Sons, Ltd., 20 St. Nicholas St., Montreal, engrs.

BIDS DESIRED

Docks—Seattle, Wash. — Until Dec. 17, by Comrs. King Co., building new ferry docks at east end of Madison St. and at Kirkland. About $50,000. S. J. Humes, co. engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Tunnel — Bridgeport, Conn. — Karn Terminal Co., 447 North Washington Ave., let contract 900 ft. rein.-con. tunnel on North Washington Ave., to J. R. Sheehan, 309 Connecticut Ex. Bldg. About $35,000. Noted May 10.

★Shaft—New York, N. Y.—(Official)—Interborough Rapid Transit Co., 165 Bway., rescinded contract building Shaft No. 2, Queensboro Subway. Work will be done on force account bases. Noted Nov. 29.

★Station Finish—New York, N. Y.—Interborough Rapid Transit Co., 165 Bway., let contract finishing stations on Webster Ave. line (Bronx Boro.) to T. Dwyer, 216th St. and Bway.

★Launchways—Camden (South Camden), N. J.—New York Shipbuilding Co., 120 Bway., New York City, let contract to Armstrong & Latta, 110 South Broad St., Phila., $1,000,000.

Shed—Oakland, Cal.—City received lowest bid building shed on municipal wharf, Clay St., from C. Christenson & Sons, 565 16th St. About $22,800.

BUILDING OPERATIONS FOR OCTOBER

Following is a list of contracts awarded published by the F. W. Dodge Co. for New England, New York, New Jersey, Pennsylvania, Maryland, Delaware, District of Columbia, Virginia, Ohio, West Virginia, Illinois, Indiana, Iowa, Wisconsin, Michigan, Minnesota, North and South Dakota, and portions of Missouri and eastern Kansas from Jan. 1 to Nov. 1:

January 1 to November 1, 1917	$1,433,092,000
January 1 to November 1, 1916	1,121,616,397
January 1 to November 1, 1915	769,173,100
January 1 to November 1, 1914	632,462,200
January 1 to November 1, 1913	743,758,000
January 1 to November 1, 1912	743,331,500
January 1 to November 1, 1911	667,433,813
January 1 to November 1, 1910	694,007,066

NEW YORK AND NORTHERN NEW JERSEY

January 1 to November 1, 1917	$286,276,000
January 1 to November 1, 1916	225,106,500
January 1 to November 1, 1915	137,108,500
January 1 to November 1, 1914	112,360,500
January 1 to November 1, 1913	223,782,000
January 1 to November 1, 1912	206,392,500
January 1 to November 1, 1911	200,027,500
January 1 to November 1, 1910	205,844,000

The October total for contracts awarded in the larger territory amount to $154,451,574, against $122,464,271 for September, and $165,574,155 for August. For the smaller territory the October figures are $38,921,000 against $35,027,000 for September and $25,498,000 for August.

Commission of Public Docks, Portland, Ore., has under consideration a proposal for the removal of Swan Island and deepening the waterway in that locality from bank to bank, embracing a width of about 4000 feet, instead of merely creating a deep water channel at the west of the island. By dredging out the island and filling in the adjacent grounds on the mainland, the property can be made valuable for dock sites, and the establishment of manufacturing plants, alongside of which the larger ships afloat can moor and discharge and load cargoes. According to rough estimates, the island is made up of about 20,000 cu.yd. of material. The ordinary charge for dredging and removal of sand and gravel from the river bed is 10c. a cu.yd. This would make the project cost about $2,000,000. The island has an approximate length of two miles and is of varying width.

Pennsylvania May Separate Road Construction and Grading

The Pennsylvania State Highway Department may let contracts for grading work separately from regular road construction next year, the department announced. This subject is receiving serious consideration because of the advance in prices of materials, the difficulty in obtaining labor and the car-service interruptions caused by the priority order of the Government. The specifications are to be studied and taken up next month for determination.

Thus far only one or two contracts have been let for grading as a separate proposition, and observations have been made on them. In a number of instances county and borough authorities have favorably commented upon the plan for separate contracts.

Something like 26 counties have agreed to coöperate with the state in road work on a 50% basis, and 16 boroughs have accepted invitations to unite in improvement of streets which are on the line of state highways.

The department announced that hereafter it would make a charge of $2.50 for sets of plans and specifications for road work. Heretofore plans were to be seen at offices of engineers of the department. Under the new arrangement plans may be bought outright by interested persons and studied at their offices or homes. The announcement says that the price is at cost.

State Highway Commissioner O'Neil has rejected all of the bids received on Nov. 8 for road work which had been contemplated for Allegheny and Somerset Counties. The prices were considered so high that the department did not feel warranted in awarding contracts. All of this work will be readvertised in the near future. Bids were asked for either reinforced-concrete or bituminous-concrete construction.

To Adjust Labor to War Needs

L. C. Marshall, dean of the School of Commerce and Administration of the University of Chicago, has been designated by the Council of National Defense as the head of the newly created section on industrial service, whose field is consideration of the labor supply in war time. "As the demands of the Government for more supplies of all sorts have increased," says the Official Bulletin, "there have necessarily arisen in the various departments placing war orders a considerable number of problems relative to proper adjustment of labor supply to the war needs."

Ship Lumber Coming Fast

Five million feet of ship lumber was the production for the week ending Nov. 23. Double that amount is expected shortly, according to W. J. Haynen, assistant purchasing agent of the Emergency Fleet Corportation. A considerable number of mills in the Southern-pine industry, which have heretofore cut no ship timbers, are coming forward with offers to produce schedules or part of schedules.

Canada Prohibits Iron Exports

The Canadian Government has decided to prohibit the exportation of iron and steel in unfinished or semifinished form suitable for use in manufactures, including pig iron, steel ingots, billets, rods, shapes, angles and plates, except under license from the Department of Customs.

Kansas City Soon To Begin $2,000,000 Sewer

Surveys have been made and plans are under way for the proposed Blue River intercepting sewer at Kansas City, Mo. The interceptor will extend from the southern city limits to the Missouri River, 13½ miles, beginning as a 24-in. pipe and ending as a 10-ft. reinforced-concrete sewer. The work will be divided into five sections. The Board of Public Works expects to advertise for bids for the first section about Jan. 1. Curtis Hill is city engineer and Alfred E. Ludlow is engineer of sewers.

Board of Three Will Decide Value of Canadian Northern

The agreement fixing the basis of the arbitration to determine the value of the 600,000 shares of common stock in the Canadian Northern Ry., which are to be purchased by the Canadian Government to give it the ownership of the system, has been executed. It prescribes a maximum value of $10,000,000 to be placed on the stock; the arbitrators may award less.

Sir William Meredith is appointed arbitrator for the government and Hon. Wallace Nesbitt for the company. They will select the third member of the board, and the award must be made by March, 1918. Meanwhile the company is to make no expenditures except for operating expenses.

RIVER CHANNEL IMPROVEMENTS—COLUMBUS, O.

Bids were received by City, Nov. 13, for widening Scotia River, including building levees, bridges, etc., from (A) W. E. Callahan Constr. Co., 1517-18 Citizens Natl. Bank Bldg., Omaha, Neb.; (B) J. B. Sheets & Co., Pittsburgh, Pa.; (C) R. H. Evans & Co., Savings Bank Bldg., Columbus, O. The unit bids were as follows:

	A	B	C
2,000,000 cu.yd. excavation, class A	$0.61	$0.55	$0.64
25,000 cu.yd. excavation, class B	4.50	2.00	5.80
4,500 cu.yd. excavation, class C	4.50	2.50	6.30
8,000 cu.yd. excavation, class D	1.50	1.50	3.15
3,000 cu.yd. excavation, class E	1.50	1.50	4.75
5,000 cu.yd. excavation, class F	3.50	2.50	5.25
10,000 cu.yd. excavation, class G	.75	2.00	1.05
Removing Town St. bridge (lump sum)	3,000.00	20,000.00	5,000.00
Removing old dam (lump sum)	3,000.00	5,000.00	10,000.00
50,000 cu.yd. solidified embankment	.75	.20	.21
70 acres dressing and seeding	70.00	250.00	105.00
10,440 cu.yd. concrete, class A	10.05	13.00	11.55
8,260 cu.yd. concrete, class B	13.25	25.00	18.00
4,350 cu.yd. concrete, class C	12.00	12.50	12.60
8,250 cu.yd. concrete, class D	12.50	14.00	12.60
1,800 cu.yd. concrete, class E	12.00	12.00	12.60
900 cu.yd. concrete, class F	18.00	14.00	18.90
40,000 sq.yd. concrete revetment, class A	1.85	2.50	2.10
12,000 sq.yd. concrete revetment, class B	4.50	3.00	6.30
35,000 sq.yd. stone revetment, class A	1.85	3.00	3.70
10,000 sq.yd. stone revetment, class B	4.85	4.00	7.75
2,000 cu.yd. stone toe wall	4.50	7.00	10.50
220M. ft.b.m. sheet piling	120.00	8.00	105.00
73,500 lin.ft. wood piling	.60	1.00	.63
Temporary bridge (lump sum)	3,000.00	25,000.00	4,200.00
1,340,000 lb. placing reinforcing steel	.015	.02	.02⅜
11,700 lb. angle spacers	.07	.07	.08½
1,370 lin.ft. steel curb	.10	2.00	1.80
Drains, manholes, conduits (lump sum)	250.00	1,500.00	2,100.00
1,473 lin.ft. concrete balustrade	5.75	20.00	6.30
1,617 lin.ft. stone balustrade	14.00	20.00	15.75
35,000 sq.ft. tooled finish	.10	.25	.10
10,700 sq.ft. sidewalk finish	.08	.10	.10
6,050 sq.yd. waterproofing	.75	1.40	2.10
1,300 sq.ft. expansion joints	1.00	.30	.30
6,600 cu.yd. gravel fill	.60	2.50	1.10
3,000 ton rip rap	3.50	4.00	3.70
3 sluice gate chambers	200.00	1,000.00	735.00
3 manholes	100.00	75.00	78.75
78-in. sluice gate	2,000.00	3,000.00	2,625.00
48-in. sluice gate	1,500.00	2,000.00	1,260.00
15-in. sluice gate	750.00	1,000.00	315.00
Removing and resetting old sluice gate	100.00	700.00	525.00
2 removing and resetting old flap valves	50.00	300.00	105.00
80 lin.ft. 15-in. vitrified pipe drain	3.00	3.00	210.00
3,000 lin.ft. concrete curbing	1.10	2.00	.63
15,000 sq.ft. cement walk	.18	.15	.21
3,000 lin.ft. pipe handrail	2.10	2.00	2.10
2,600 sq.yd. stone paving	1.00	2.00	1.53
Extended totals stone balustrade	$2,262,979.50	$2,361,379.00	$2,616,537.50
Extended totals, concrete balustrade	2,248,811.25	2,358,859.00	2,600,349.65

BARGE CANAL WORK, ALBANY, N. Y.

Contract 152

Bids were received by W. W. Wotherspoon, supt. pub. wks., for rebuilding upper end of Lock No. 35, Lockport, from (A) Frank L. Cohen, 49 Niagara St., Buffalo; (B) Lupfer & Remick, 592 Ellicott Sq., Buffalo. The unit bids were as follows:

	A	B
7,440 cu.yd. excavation	$3.40	$5.00
4 M. ft. b. m. sawed lumber—white oak	150.00	150.00
7,500 cu.yd. second-class concrete	10.00	11.00
9 cu.yd. first-class reinforced concrete	15.00	15.00
4,670 lb. metal reinforcement	.065	.065
17,000 lb. structural steel	.12	.12
17,000 lb. machined castings	.12	.14
480 lb. metal duct	.14	.16
420 lin.ft. fiber duct	.20	.15
80 lin.ft. diamond drill borings	3.60	6.00
Removing, storing and reinstalling lock equipment (lump sum)	1,000.00	5,500.00
Removing and reinstalling electrical conductors (lump sum)	500.00	1,000.00
Cofferdams, pumping, bailing and draining (lump sum)	6,000.00	10,000.00
Extended totals	$113,354	$142,278

Contract 170

Bids were received by W. W. Wotherspoon, supt. pub. wks., for completing junction lock and canal prism excavation and incidental work at South Greece, from (A) Cleveland & Sons Co., Brockport; (B) Woolsey Constr. Co., Davenport, Ia; (C) Mohawk Dredge & Dock Co., Inc., Herkimer. The unit bids were as follows:

	A	B	C
27,000 cu.yd. excavation	$0.80	$0.85	$1.25
11,300 cu.yd. forming embankment	.20	.25	.25
10 M. ft.b.m. sawed lumber in lock gates and miter sills	80.00	100.00	80.00
20.3 M. ft.b.m. sawed lumber, hemlock	60.00	80.00	60.00
2,190 cu.yd. second-class concrete	12.00	11.00	11.00
2,000 cu.yd. wash wall	2.50	3.00	2.50
860 cu.yd. fourth-class rip-rap	2.00	3.00	2.00
15,800 lb. metal work for lock gates	.16	.16	.15
1,300 sq.ft. steel sheet piling	1.50	1.80	1.30
190 cu.yd. stone filling in cribs	1.75	2.00	1.75
Cofferdams, pumping, bailing and draining (lump sum)	900.00	900.00	800.00
Extended totals	$64,589	$67,217	$74,596

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until Dec. 29, 1917.

Bridge Repairs

BOARDS OF SUPERVISORS, ALBANY COUNTY AND RENSSELAER COUNTY, STATE OF NEW YORK

Troy, N. Y.

Sealed bids or proposals for repairing 12th Street Bridge over the Hudson River between Ontario Street, City of Cohoes and 12th Street, Lansingburg, City of Troy, in accordance with form of contract, plans and specifications adopted October 18th, 1917, will be received at the office of C. A. Roemer, County Superintendent, County Court House, Troy, N. Y., until twelve o'clock noon, Saturday, December 29th, 1917, and then and there will be publicly opened and read.

The work consists of repairing trusses and floor beams, renewing all woodwork of floor, building new retaining wall on south side of Cohoes approach and paving bridge and approach with wood block paving.

List of the approximate quantities of material involved is given below:

Structural steel (excluding spikes), 48,000 lbs.

Rivets to knock out, 700.

Holes to drill, 10,100.

Rivets to drive, 9,850.

Creosoted Yellow Pine Scantling, 86,000 ft. B.M.

Creosoted T & G Plank, 62,000 ft. B.M.

Creosoted 2-in., 29,000 ft. B.M.

Old Lumber, off, 175,000 ft. B.M.

3-in. Creosoted wood block paving, 1,720 sq.yds.

3½-in. Creosoted wood block paving, 1,540 sq.yds.

Concrete curb, 673 lin.ft.

7-in. concrete base, 322 cu.yds.

Catch Basins, 2.

Concrete sidewalk paving, 3,540 sq.ft.

Concrete Retaining Wall and Pedestals, 470 cu.yds.

Reinforced Rods and Dowels, 2,000 lbs.

Pipe Railing, 565 lin.ft.

Bids should be addressed to Highway Committee of Rensselaer County and Roads and Bridges Committee of Albany County, Rensselaer County Court House, Troy, N. Y., and endorsed "Bid for repairing 12th Street Bridge."

Bids must state prices for all items of the work and bids which do not include all the prices called for in the bidding form may be rejected.

Plans and specifications may be seen and bidding forms obtained at the office of E. J. Bedell, County Superintendent, Court House, Albany, N. Y., or C. A. Roemer, County Superintendent, Court House, Troy, N. Y.

All proposals must be made upon the form furnished by the County Superintendents and must give prices in both words and figures and be signed by the bidder, with his business address and place of residence.

Each bidder will be required to give the Committee satisfactory evidence of his competency, experience and responsibility to perform such work.

Each bid must be accompanied by a certified check or draft for Two Thousand Five Hundred Dollars ($2,500.00) payable to the Treasurers of Albany and Rensselaer Counties, N. Y., such check to be returned to the bidder unless forfeited under the conditions herein stipulated.

A bond will be required for the faithful performance of the contract in the sum of 50% of the contract price, with a surety company, authorized to do business, in the State of New York and satisfactory to the Committees.

The person or firm to which contract shall be awarded will be required to offer his surety and to execute contract and furnish required bond within ten days (excluding Sundays) from the date of mailing notice to him, at the address given in his bid, that contract is ready for signature; and in case of failure or neglect to so appear and execute contract and bond, the bidder will be deemed to have abandoned the contract, and the check accompanying the same shall be forfeited to the Counties of Albany and Rensselaer.

The right is reserved to increase or diminish the quantity of work called for, or to omit or modify particular items, as may be deemed necessary.

The right is reserved to reject any and all bids and to waive any defect or informality at the discretion of the committee, should the same be deemed to the best interest of the Counties of Albany and Rensselaer.

WILLIAM B. SHERMAN
A. C. NILES
C. Z. BENNETT
SALEM H. WHITE
JOHN H. FINNERTY
Highway Committee of Rensselaer County, Board of Supervisors.

JOHN J. THOMSON
ALEXANDER FLANSBURG
FREDERICK J. VAN WORMER,
EMANUEL WENGER
MICHAEL S. POE
Roads and Bridges Committee of Albany County, Board of Supervisors.

Bids received until Dec. 14, 1917.

Volcano Lake Levee Raising

El Centro, Cal., Nov. 20, 1917.

Sealed proposals will be received by the Board of Directors of the Compania de Terrenos y Aguas de la Baja California (S. A.), at its office in the Masonic Temple in the City of El Centro, State of California, until 10 o'clock a.m. of the 14th day of December, 1917, and thereupon opened, for the raising of Volcano Lake Levee, which is situated in the Republic of Mexico and begins near Black Butte and extends easterly to the east line of the Cudahy tract, a distance of approximately fourteen and one-half miles.

The precise grade to which said levee is to be raised is particularly stated in the plans and specifications and is for approximately nine and a half miles thereof, to wit: For that part of the levee lying between Black Butte and the Arroyo Tortuoso, a raise of approximately three feet above its present elevation; for that part of the levee lying easterly from the Arroyo Tortuoso, the raise to be from approximately 2.5 feet tapering to nothing.

The material for this raise will be taken exclusively from borrow pits to be provided by the Compania, approximately nine miles easterly from the west end of the Volcano Lake levee, and which are approximately one-fourth mile from the present tract. Connection will have to be made to such track from the borrow pits. The material used in making this raise may be hauled in cars over the existing track now laid on the levee. The estimated yardage is approximately 555,000 cubic yards.

Said work shall be completed on or before the 15th day of April, 1918.

Plans and specifications can be seen at the office of the Board of Directors in the Masonic Temple, in the City of El Centro, State of California, and at the office of the Chief Engineer of said Compania de Terrenos y Aguas de la Baja California (S. A.), in the City of Calexico, State of California, to which plans and specifications reference is hereby made for a more detailed description of the work to be done.

Any bidder to whom the contract shall be awarded shall, within ten days after the acceptance of his bid, make, execute and deliver to the Board of Directors a written contract in form satisfactory to said Board, for the performance of said work within the time and in the manner stated in said notice, plans and specifications, and also furnish it an acceptable bond in the sum of 25 per cent. of the total contract price, based on the Compania's estimate of the amount of work to be done, for the faithful performance of the said contract, and also furnish an additional bond in the sum of 50 per cent. of the total contract price, based on the Compania's estimate of the amount of work to be done, as a guaranty that the contractor will pay in full the claims of all persons performing labor upon or furnishing material to be used in such work.

Each bid shall be accompanied by a certified check for ten thousand ($10,000.00) dollars, made payable to the Treasurer of the Compania, and to be forfeited to said Compania should bidder fail for ten days after the acceptance of his bid to enter into said contract with the said Compania and furnished the required bonds.

The contract will be let to the lowest responsible bidder, but the Board of Directors reserves the right to reject any or all bids.

By order of the Board of Directors of the Compania de Terrenos y Aguas de la Baja California (S. A.)

R. D. McPHERRIN,
Secretary.

Bids received until Jan. 5, 1918.

Levee Construction

Chamois, Mo.

Sealed proposals will be received up to One O'Clock, Jan. 5th, 1918, at the Office of the Secretary of the Board of Commissioners of the Shawnee Creek Drainage District in Chamois, Missouri, for the construction of 60,000 cubic yards of earth levee.

Plans, specifications, bidders' forms, amount of bidder's bond or check, bond for construction and all information needed for bidders can be had of the Engineer, H. E. Steinmann, Chamois, Mo. Legal advertisement in the News of Osage County, Chamois, Mo.

J. RICHARD GARSTANG,
Secretary.

Chamois, Mo.

CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 58 to 61 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Dec. 17.	Madill, Okla.	Dec. 13
Dec. 20.	Brooklyn, N. Y.	Dec. 13
Dec. 20.	Wooster, Ohio Adv. Nov. 29 and Dec. 6.	Nov. 29

SEWERS

Bids Close		See Eng. News-Record
Dec. 17.	Millburn, N. J.	Dec. 13
Dec. 18.	Phila., Pa.	Dec. 13
Dec. 19.	Baltimore, Md.	Dec. 6
Dec. 19.	Brooklyn, N. Y.	Dec. 13
Dec. 21.	Youngstown, O.	Dec. 13
Dec. 24.	West Park, O.	Dec. 13
Dec. 30.	Rocky River, Ohio	Nov. 29
Feb. 1.	Toledo, O.	Dec. 13

BRIDGES

Bids Close		See Eng. News-Record
Dec. 17.	Chandler, Okla.	Dec. 13
Dec. 17.	San Diego, Cal.	Dec. 13
Dec. 18.	Kansas City, Mo. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 18.	Beatrice, Neb.	Dec. 6
Dec. 18.	Princeton, Minn.	Dec. 6
Dec. 21.	Kansas City, Mo. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 21.	Pocatello, Idaho	Dec. 6
Dec. 21.	Necedah, Wis.	Dec. 6
Dec. 22.	Livingston, Ala.	Nov. 29
Dec. 29.	Troy, N. Y. Adv. Dec. 13.	Dec. 13
Jan. 8.	Salinas, Cal.	Dec. 13

STREETS AND ROADS

Bids Close		See Eng. News-Record
Dec. 15.	Jasper, Ala.	Nov. 29
Dec. 15.	Fitchburg, Mass. Adv. Nov. 29	Nov. 29
Dec. 15.	Hatley, Que.	Dec. 6
Dec. 15.	La Crosse, Wis.	Dec. 13
Dec. 17.	Los Angeles, Cal.	Dec. 6
Dec. 17.	Okmuigee, Okla. Adv. Nov. 29 and Dec. 6.	Dec. 6
Dec. 17.	Everett, Wash.	Dec. 6
Dec. 17.	Louisiana	Dec. 13
Dec. 17.	Union, N. J.	Dec. 13
Dec. 19.	Cleveland, O.	Dec. 13
Dec. 20.	Sturgeon Bay, Wis.	Dec. 13
Dec. 20.	Youngstown, O.	Dec. 13
Dec. 22.	Dayton, O.	Dec. 6
Dec. 24.	California	Dec. 13
Dec. 27.	Elizabeth, N. J.	Nov. 29
Dec. 27.	Ohio	Dec. 13
Dec. 27.	Atlantic City, N. J.	Dec. 13
Dec. 28.	Webster Springs, W. Va.	Dec. 13
Dec. 29.	Huntington, Ind.	Dec. 6
Dec. 31.	Bay Minette, Ala.	Dec. 6
Jan. 2.	Alexandria, La.	Dec. 13

EXCAVATION AND DREDGING

Bids Close		See Eng. News-Record
Dec. 15.	Sheboygan, Wis.	Dec. 6
Dec. 15.	Toronto, Ont.	Dec. 6
Dec. 17.	Jefferson, Ia.	Dec. 13
Dec. 18.	Elbow Lake, Minn.	Dec. 6
Dec. 20.	Pine Bluff, Ark.	Dec. 13
Dec. 20.	Albany, N. Y. Adv. Nov. 29 to Dec. 13.	Nov. 29

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Dec. 14.	Bedford Hills, N. Y. Adv. Dec. 13.	Dec. 13

BUILDINGS

Bids Close		See Eng. News-Record
Dec. 15.	Gallup, N. M.	Nov. 29
Dec. 15.	Kokomo, Ind.	Dec. 6
Dec. 17.	Kenmore, Ohio	Nov. 29
Dec. 17.	New Paltz, N. Y. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 17.	Pittsburgh, Kan.	Nov. 29
Dec. 17.	East Cleveland (Cleveland P. O.) O.	Dec. 6
Dec. 17.	Miami, Okla.	Dec. 6
Dec. 17.	Austin, Minn.	Dec. 13
Dec. 18.	Brooklyn, N. Y.	Dec. 13
Dec. 18.	Kansas City, Mo. Adv. Nov. 29	Nov. 29
Dec. 19.	Milledgeville, Ga.	Dec. 13
Dec. 19.	Brooklyn, N. Y.	Dec. 13
Dec. 20.	Wingdale, N. Y. Adv. Dec. 13.	Dec. 13
Dec. 21.	Harrisburg, Pa.	Dec. 13
Dec. 21.	Shaker Heights (Cleveland P. O.) O.	Dec. 6
Dec, 21.	Twin Bridges, Mont.	Dec. 13
Dec. 22.	Oxford, Ohio	Dec. 6
Dec. 24.	Cleveland, Ohio	Dec. 6
Dec. 24.	Syracuse, N. Y.	Dec. 13
Dec. 30.	St. Cyprien, Que.	Dec. 13
Jan. 1.	Wichita, Kan.	Nov. 22
Jan. 8.	Dodge Center, Minn.	Dec. 13
Jan. 15.	New York, N. Y.	Nov. 29

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Dec. 17.	Electric Traveling Cranes —Washington, D. C.	Dec. 13
Dec. 17.	Steel Barge — Memphis, Tenn. Adv. Dec. 13.	Dec. 13
Dec. 17.	Post Office—Denton, Tex.	Nov. 8
Dec. 17.	Wharf and Boathouse—Santa Rosa, Fla. Adv. Nov. 29 and Dec. 6.	Nov. 29
Dec. 17.	Motor Generator Sets — Washington, D. C.	Dec. 6
Dec. 17.	Seaman Gunners' Quarters Washington, D. C.	Dec. 6
Dec. 17.	Extension to Power House Indian Head, Md.	Dec. 13
Dec. 17.	Tower and Buildings — Washington, D. C.	Dec. 13
Dec. 18.	Laterals — Torrington, Wyo.	Nov. 1
Dec. 19.	Dredging—San Francisco, Cal.	Dec. 6
Dec. 21.	Dredging — Philadelphia, Pa.	Nov. 29
Dec. 21.	Wreck Removal — Washington, D. C. Adv. Dec. 13.	Dec. 13
Dec. 24.	Fuel Oil System — San Diego, Cal.	Dec. 13
Dec. 26.	Sewerage System, Water Supply Intake, Reservoir —Washington, D. C.	Dec. 6
Dec. 27.	Post Office — Alexandria, La. Adv. Nov. 22 and 29.	Nov. 22
Dec. 27.	Steam Heating System—Shawnee, Okla.	Dec. 6
Jan. 4.	Buildings — Grande Isle, La. Adv. Dec. 6 and 13.	Dec. 6
Jan. 5.	Jetty Work — Jacksonville, Fla.	Dec. 13
Jan. 7.	Post Office — Eldorado, Kan.	Dec. 6
Jan. 7.	Post Office — Shawnee, Okla.	Dec. 6
Jan. 7.	Electric Traveling Cranes——Brooklyn, Y.	Dec. 13
Jan. 14.	Post Office—Owego, N. Y. Adv. Dec. 13.	Dec. 13
Jan. 28.	Post Office—Sunbury, Pa.	Dec. 6

MISCELLANEOUS

Bids Close		See Eng. News-Record
Dec. 17.	Docks—Seattle, Wash.	Dec. 6
Dec. 18.	River Channel Improvement—Columbus, O. Adv. Dec. 13.	Dec. 13
Dec. 18.	Fire Escapes—Dover, N. J. Adv. Dec. 13.	Dec. 13
Dec. 18.	Seawall—Long Beach, Cal.	Dec. 13
Dec. 19.	Flooring—Willard, N. Y. Adv. Dec. 13.	Dec. 13
Dec. 22.	Creek Diversion—Rosedale, Kan.	Dec. 13
Dec. 26.	Station Finish—New York, N. Y.	Dec. 13
Dec. 28.	Levee Work — Shreveport, La.	Dec. 13
Jan. 2.	Improving Harbor — Newport, Ore. Adv. Nov. 29 to Dec. 13.	Nov. 29
Jan. 5.	Levee—Chamois, Mo. Adv. Dec. 13.	Dec. 13

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. J., Newark—City plans to build brick meter and water gage, 16 ft. in diam. About $15,000. M. R. Sherrerd, city engr.

Ga., Stone Mountain—(Official)—City defeated $15,000 bonds to build water system. Noted Nov. 8.

Miss., Natchez—City plans to build water system or improve old one. O. M. Fowler, city engr.

O., Cleveland—Council approved $500,000 bond issue to extend water system. R. Hoffman, city engr.

Mich., Highland Park—(Official)—City receiving bids early next year for 10,000,000-gal. daily capacity filter plant and improving pump house. About $300,000. L. C. Whitsit, city engr. Noted Nov. 22.

Mich., Sault Ste. Marie—(Official)—City plans to install chlorine control apparatus at pumping station. W. M. Rich, city engr.

Minn., St. Cloud—City rejected bids for furnishing 271 tons, 8-12 in. pipe for water system, and laying water mains. New bids in February. Noted Oct. 18.

Water-Works (Continued)

Neb., Scottsbluff—City sold $22,000 bonds to extend water system. O. F. Finley, city engr. Noted July 5.

Wyo., Laramie—City voted $60,000 bonds to extend water system. J. Coolican, clk.

Mont., Scobey—City election Jan. 29 to vote on $35,000 bond issue to build water and sewerage systems. Noted Aug. 30.

Okla., Guthrie—City having plans prepared by Benham Eng. Co., engrs., Colcord Bldg., Oklahoma City, building new supply flow line and pumping plant. About $200,000. G. C. Anderson, clk. Noted Oct. 25.

Idaho, Hailey—City defeated $100,000 bonds to build water system and power plant. Noted Sept. 27.

Cal., Pasadena—City plans to build new well and pumping plant. R. V. Orbison, city engr.

Cal., Santa Barbara—City has been offered site in Upper Montecito Valley and fund of $12,000 to build reservoir.

Cal., Vail—City voted $11,000 bonds to build water and light systems.

Que., Pointe Claire—Town plans to improve water system and install filter system. About $250,000.

BIDS DESIRED

N. Y., Brooklyn—Until Dec. 20, by Bd. Pub. Charities, Municipal Bldg., New York City, installing water system in Kings Co. Hospital.

Okla., Madill—(Official)—Until Dec. 17, by City, building water system, including wells, pump, stand pipe, pipe, etc. J. K. Ross, city engr. Noted Nov. 29.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—W. Williams, Comr. Water Supply, Gas and Electricty, Municipal Bldg., received low bids, Dec. 3, hauling and laying water mains and appurtenances to cross connect existing mains in Southern Blvd., from East 163rd St. to East 181st St. (Bronx Boro.) from Knight & De Micco, Inc., 2353 Washington Ave., $4577; Beaver Eng. & Contg. Co., Inc., 51 Chambers St., $5054; J. A. Gregory, $8444. Noted Nov. 29.

★S. C., Columbia—City let contract furnishing one 250- and two 400-hp. pumps for water system, to Perry Mann Electric Co., 1537 Main St., $9641. Noted Nov. 29.

★Ky., Covington—City let contract installing new pumping machinery and electric motors, to Union Light, Heat & Power Co., $36,000.

O., Akron—(Official)—City received low bids furnishing and delivering centrifugal pumps, from Morris Machine Wks., 41 Cortland St., New York City, $4910; J. L. Skeldon Eng. Co., 359 Spitzer Bldg., Toledo, $5000; R. D. Wood & Co., 400 Chestnut St., Phila., $5300.

★O., Canton—City let contract drilling 12 new wells, furnishing pipe and screens, to Lane & Bowler, Chelsea Ave., Memphis, Tenn., $19,000. Noted Nov. 22.

★O., Euclid—City let contract building 6 in. water mains in Independence, Chelsea, Nautmann, Ivan, and Nicholas Aves., to Gould & Maybach, 823 East 150th St., Cleveland, $27,150.

★Que., Three Rivers—City let contract building pumping station and reservoir to Phoenix Bridge & Iron Wks., Ltd., 83 Colborner St., Montreal, $12,000.

SEWERS

Proposed Work

Mass., Boston—(Official)—City plans to build sewers in Atlantic Ave., from Summer St. to Pearl St., Roslindale Branch of Stony Brook, West Roxbury; in North Beacon St., from Robert to South Sts., West Roxbury; in North Beacon St., from Market to Cambridge Sts., Brighton; in Holton St., from Antwerp to Everett Sts., Brighton; Rutheford Ave. from Baldwin to Allen Sts., Hyde Park; etc. E. F. Murphy, comr. pub. wks.

N. Y., Jamaica—Bd. Estimate granted final authorization for building sewer in Van Wyck Ave., from Silkworth to Jamaica Aves.; in Metropolitan Ave. from Van Wyck to Troy Aves. About $16,300.

N. Y., Watervliet—City soon lets contract building sewers in 23rd St. to connect with new storm sewerage system. C. F. Polk, clk.

Ky., Owensboro—City soon lets contract building 2 sewers. About $421,715. E. B. Shifley, city engr. Noted Aug. 9.

Kan., Parsons—(Official)—State Bd. Health ordered city to build secondary treatment works for sewage before discharging it into La Bette Creek. About $20,000. C. A. Haskins, engr. div. water and sewers.

Mont., Scobey—See "Water-Works."

Mo., Kansas City—City rescinded contract let to M. Walsh building Troost Ave. trunk line sewer, from 50th to 64th St. About $165,000. Work will be readvertised. Noted Sept. 27.

Tex., Dallas—Attorney General's Dept. approved $300,000 bonds to build sewers. H. Mosley, city engr.

Okla., Sapulpa—See "Streets and Roads."

Okla., Pilcher—City plans to build sewerage system. About $30,000.

N. M., East Las Vegas—(Official)—City lets contract in January, building sewerage system, involving 22,250 ft. 8-12-in. vitr. pipe, 38 manholes and 21 flash tanks. About $29,478. V. K. Jones, city engr. Noted Nov. 29.

Cal., Los Angeles—City plans to build sewers on Shepard St., from Pacific to Carolina St., also on State St. A. Hansen, city engr.

BIDS DESIRED

N. Y., Brooklyn—Until Dec. 19, by L. H. Pounds, boro. pres., building sewers on Ave. M, from West St. to Ocean Pkway.; East 3rd, 4th and 5th Sts., and Ocean Pkway.; outlet sewers crossing West St. from Ave. M to 23rd Ave.; 23rd Ave. from West St. to 60th St. and 60th St. from 23rd Ave. to Bay Pkway., involving 4970 lin.ft. 6-48 in. pipe, 33 manholes, 27 sewer basins, 34,000 ft. sheeting and bracing, and 10 cu.yd. concrete. About $39,924.

N. J., Millburn—Until Dec. 17, by Twp. Com., building storm sewer between Ridgewood Rd. and Millburn Ave. M. R. Silance, clk.

Pa., Phila.—(Official)—Until Dec. 18, by G. E. Datesman, dir. pub. serv., building intercepting sewers along Frankford Creek, Contr. No. 17; also miscellaneous piping for grit chamber north of Lycoming St. and west of O St., Contr. No. 16-L.

O., Toledo—(Official)—Until Feb. 1, by H. Goodwillie, dir. pub. serv., building 6 mi. 42-72-in. sewers and pumping plant. About $600,000 and $100,000, respectively. H. C. McClure, city engr. Noted Nov. 22.

O., West Park—(Official)—Until Dec. 24, by F. Feuchter, village clk., building stormwater sewer in Barthelman Ave. from station 6 to station 21.

O., Youngstown—Until Dec. 21, by City, building Mill Creek Dist. sewer; 5 separate contracts, including some branch lines and rein.-con. bridges to carry sewer over ravines in Mill Creek Park. Cost between $250,000 and $300,000. F. M. Lillie, city engr. Noted Aug. 16.

Ind., Union City—(Official)—Until Dec. 19, by City, building sewer on Plum St., involving about 7000 lin.ft. various-sized pipe. About $21,164. C. E. Hollinger, city engr. Noted Nov. 29.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Wis., White Fish Bay—City let contract building 12,000 ft. storm sewer, to Wisconsin Constr. Co.

★Kan., Larned—City let contract building sewage-disposal plant to McCoy & Taylor. Noted Aug. 9.

★Cal., Los Angeles—City let contract for drainage work in Drainage Impvt. Dist. No. 2, west of Los Angeles, involving 53,977 ft. 8-18-in. unglazed sewer pipe, 5163 ft. 24-30-in. rein.-con. pipe and 21 manholes, to Mlagenovich & Gillespie, 3920 Wisconsin St., $142,982.

BRIDGES

Proposed Work

N. J., Red Bank—Bd. Freeholders Monmouth Co., Freehold, rejected all bids for building Hubbards Bridge over Shrewsbury River. Work will be readvertised. Noted Nov. 22.

N. C., Elizabethtown—Bladen Co. Comrs. plan to build bridge over Black River from here to Burgaw, Pender Co.

Fla., Jacksonville — Duval Co. election Jan. 8, to vote on $423,000 bond issue to build bridges.

Mich., Battle Creek—City plans to build steel and cement arch bridge over Kalamazoo River on Angell St., to replace present wooden structure. E. H. Hunt, city engr., preparing plans.

Minn., Rochester—City having plans prepared for bridge, two 150-ft. spans with 16-ft. roadway to replace present bridge near power dam. A. F. Wright, clk.

Neb., Falls City—(Official)—Richardson Co. defeated $100,000 bonds to build bridges and culverts. Noted Nov. 15.

Tex., Corpus Christi—See "Miscellaneous."

Okla., Cheyenne — See "Streets and Roads."

Okla., Pawnee—See "Streets and Roads."

Wash., Waterville — See "Streets and Roads."

Oregon—See "Streets and Roads."

Cal., Santa Barbara—See "Streets and Roads."

BIDS DESIRED

N. Y., Troy—(Official)—Until Dec. 29, by C. A. Roemer, Rensselaer, co. supt., repairing 12th St. bridge over Hudson River between Ontario St., Cohoes and 12th St., Lansingburg, Troy; advertised in this issue.

N. J., Atlantic City — See "Streets and Roads."

O., Youngstown—See "Sewers."

Kan., Rosedale—(Official)—See "Miscellaneous."

Okla., Chandler—Until Dec. 17 by J. C. Pringey, clk., Lincoln Co., building several bridges.

Cal., Long Beach—See "Miscellaneous."

Cal., Salinas—Until Jan. 8, by T. P. Joy, clk., Monterey Co., building pile-trestle over Lewis Creek.

Cal., San Diego—Until Dec. 17, by J. B. McLees, clk., San Diego Co., building two pile bridges over Tijuana River; total length, 675 ft.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Newark—City let contract building steel and concrete bridge over tracks of Lehigh Valley R.R. and Pennsylvania R.R. on Ave. R, to Linde & Griffith, 4th Ave., Branch Brook, Noted July 26.

★Fla., West Palm Beach—(Official)—Palm Beach Co. Comrs. let contract building 2 steel draw bridges over East Coast Canal to Champion Bridge Co., Wilmington, O., $19,600. Noted Nov. 8.

★Oregon—State Highway Comn., Portland, let contract building draw bridge across John Day River, Clatsop Co., to Portland Bridge Co., Yeon Bldg., Portland. $20,999. Noted Nov. 22.

STRUCTURAL STEEL WORK

Proposed Work

Mich., Battle Creek—See "Bridges."

BIDS DESIRED

Kan., Rosedale — (Official) — See "Miscellaneous."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. J., Newark—See "Bridges."

★Fla., West Palm Beach—(Official)—See "Bridges."

REINFORCED CONCRETE

Proposed Work

O., Cleveland—See "Industrial Works."

Utah, Salt Lake City — See "Industrial Works."

Ariz., Phoenix—See "Buildings."

Reinforced Concrete (Continued)

BIDS DESIRED

O., **Youngstown**—See "Sewers."

Kan., **Rosedale**—(Official) — See "Miscellaneous."

Cal., **Long Beach**—See "Miscellaneous."

PRICES AND CONTRACTS AWARDED
(★Indicates award of contract)

★N. J., **Newark**—See "Bridges."

STREETS AND ROADS

Proposed Work

R. I., **Barrington**—Town voted $20,000 to build, and $8000 to maintain roads.

Conn., Bridgeport—City having plans prepared extending Broad St. from Elm to Catherine Sts., also building tunnel under Golden Hill St. and plaza in front of High School on Lyon Terrace. About $239,200. A. H. Terry, city engr.

N. Y., Buffalo—City plans to pave Hertel Ave. from Wesley Ave. to Main St. and Greene St. from Williams to Lovejoy St. D. J. Sweeney, clk.

N. J., Flemington—Bd. Freeholders Hunterdon Co., plans to build section Clinton-West Portal Rd. About $48,000. W. W. Foster, clk.

N. J., New Brunswick—Bd. Freeholders Middlesex Co. plans to build following roads: Woodbridge-New Brunswick, Sec. 2, $90,000; Plainfield Ave., South Plainfield, $70,000; South Plainfield Port Reading, $52,500; Washington Rd., Parlin, $133,000; Ryder's Lane, Clifton Ave., $150,000. A. B. Fox, Perth Amboy, co. engr.

N. J., Newton—Bd. Freeholders, Sussex Co. plans to improve Newton-Stanhope, Newton-Branchville, Frankford-Sandyston, Lewisburg, Sparta, Franklin-Stockholm, Sussex-Hamburg, North Church, Hamburg, Sussex, and Hardystonville Rds.

N. J., South Amboy—City plans to issue $20,000 bonds to improve Catherine and Henry Sts. L. T. McMichael, city engr.

Pennsylvania — State Highway Dept., Harrisburg, plans to build 53 mi. road between Harrisburg and Reading. Federal Government to appropriate towards cost. J. D. O'Neil, highway comr

Penn., Pittsburgh — (Official) — Council passed ordinance paving, grading and curbing Exeter St. from Greenfield Ave. to Frank St.; Mapleton Way from Heth's Ave. to Samantha Way; Methyl St. from Wentworth St. to Coast Ave.; Warrington Ave. from Montooth St. to West Liberty Ave.; Fennimore St. from Linden to Gettysburg Sts.; Eckert St. from Lecky to McClure Aves.; Elmira St. from East to Howard Sts. R. Swan, city engr.

Pa., Sharpsville — (Official) — Council passed ordinance to grade Mercer Ave. from Walnut St. to Boro. line. W. A. Graber, boro. secy.

N. C., Asheville—City will issue $127,000 bonds to pave streets. B. M. Lee, city engr.

Ga., Columbus—Muscogee Co. plans to build Dixie Overland Highway from Columbus to Chattahoochee Co. line. F. U. Garrard, chn. co. comrs.

Fla., Jacksonville — Duval Co. election Jan. 8, to vote on $577,000 bonds to pave roads with asphalt, brick and concrete.

Ala., Birmingham—City plans to widen 3rd St. along Capitol grounds from Walnut to North Sts. About $25,000. M. B. Cowden, city engr.

Ala., Gadsden—Etowah Co. plans to build Hokes Bluff Highway, also county's section Gadsden-Attalla Rd. Federal Government will appropriate $10,000, state $2500, and county $7500. W. S. Keller, Montgomery, state highway engr.

Miss., Fulton—Itawamba Co. plans to build roads. Federal Government will appropriate $45,1000 towards cost.

La., New Iberia—City will sell $75,000 bonds for street and road work. H. S. Sealy, mayor. Noted Sept. 27.

Ky, Lebanon—(Official)—Marion Co. received no bids building 5½ mi. inter-county road from here to Bardstown, beginning at Smocks Chapel and extending to Nelson Co. line. Work will be readvertised in spring. Noted Nov. 22.

O., Bellaire—(Official)—Council passed ordinance to grade, pave, curb and build drains and retaining walls in 23rd St. from Belmont St., W. to west corporation line. A. J. Norton, city engr.

O., Cincinnati—(Official)—City plans to pave Hill Crest Rd. from Hamilton Ave. to point 1700 ft. east, bituminous macadam. F. Krug, city engr.

O., Cleveland—See "Miscellaneous."

O., Lebanon—Warren Co. plans to macadamize 4 mi. Waynesville-Lebanon Pike. About $30,000.

O., Lima—Allen Co. plans to improve Lincoln and Dixie Highways through this county in accordance with instructions of Federal and State Governments. About $1,000,000.

Ind., Evansville—Vanderburgh Co. will sell $170,000 bonds for highway improvements. C. P. Beard, aud.

Ind., South Bend—St. Joseph and Elkhart Cos., Goshen, plan to build road between Elkhart and Osceola. State will appropriate ½ of cost.

Michigan—State Highway Comn., Lansing, soon lets contract building 14½ mi. gravel and stone road in Osceola Co. F. F. Rogers, state highway comr.

Ill., Belvidere — Bd. Supervs. Boone Co. plans election to vote on $400,000 bonds for road work.

Ill., Carlinville — Macoupin Co. voted $160,000 bonds to complete St. Louis-Springfield hard road through county. Noted Sept. 27.

Ill., Effingham—Effingham Co. voted $104,000 bonds to pay ⅓ of cost of building Old Trails' Rd.

Wisconsin—State Highway Comn., Madison, plans to surface 6 mi. Appleton-Green Bay Rd., concrete. About $81,000. A. R. Hirst, state highway engr.

Wis., Durand—Pepin Co. plans to build roads. About $30,000. W. C. Richardson, clk.

Wis., Juneau—Dodge Co. plans to appropriate about $50,000 for highway work.

Wis., Monroe—Green Co. plans to build roads. About $210,750. State and Federal Government to appropriate toward cost. J. W. Stewart, co. aud.

Wis., Oshkosh—City Council plans $34,336 bond issue to improve streets. G. H. Randall, city engr.

Ia., Sac City—Sac Co. plans to grade 35 mi. road. W. D. Maxwell, co. engr.

Minn., Elbow Lake—Grant Co. plans to build roads. About $24,000. Federal Government will appropriate $12,000 toward cost.

Minn., Minneapolis—Hennepin Co. plans building 20 mi. River Rd. in Dayton, $40,000; grading and surfacing 21 mi. Osseo Rd., $80,000; widening 4 mi. Superior Blvd., concrete, from 14-18 ft., $16,000; grading, surfacing and graveling Excelsior Ave. between Minneapolis and Hopkins, $75,000; grading Rockford Rd. between Robbinsdale and Wright Co. line, $40,000; resurfacing Lake St. near Minnehaha Blvd., $5000; other improvements, $50,000. A. P. Erickson, co. aud. Noted Apr. 26.

Kan., Junction City—Geary Co. having plans prepared building brick road to connect Junction City and Ft. Riley. Union Pacific R.R. will appropriate toward cost. About $27,450. B. Doyle, co. engr. Noted Aug. 23.

Kan., Topeka—Kansas Good Rds. Assn. plans to build concrete highway on West 17th St. here, through Seabrook along main country road to county line at Dover, 19 mi. About $304,000. J. F. Smith, pres. Kansas Rd. Assn.

Neb., Omaha — City plans to pave 4 blocks on 35th Ave., and 3 blocks on 42nd St., asphaltic concrete. J. A. Bruce, city engr.

Neb., Scottsbluff — City plans to pave streets in business section.

S. D., Milbank—Grant Co. plans to build road from Milbank to Big Stone. Federal Government and state will appropriate toward cost.

S. D., Mitchell—City plans to pave number of streets, either 2 coat portland cement, 1 coat portland cement, asphaltic concrete; creosoted wood blocks, sheet asphalt or bitulithic; also curbs and gutters on same. S. H. Smith, city engr.

N. D., Forman — Sargent Co. Comrs voted $40,000 bonds to improve 68 mi. state highway within its limits.

Missouri—State Highway Comn., Jefferson, plans to build 30 mi. road, 20 ft. wide in Cole Co. from Moniteau Co. line to Osage River. About $90,000. Federal Government will appropriate $45,000 towards cost.

Mo., Danville — Montgomery Co. voted $45,000 bonds to build rock road in Montgomery City Rd. Dist.

Mo., Independence—Jackson Co. having plans prepared building 3½ mi. 30-ft. roadway, brick, on rock base. O. C. Shelet, engr.

Mo., St. Louis—(Official)—Council passed ordinance to build granitoid sidewalks on Ivanhoe Ave. between Scanlan and Marquette Aves.; Marquette Ave. between Ivanhoe and McCausland Aves.; on Kingshighway between Kingshighway Southwest and Arsenal St.; Berthold Ave. between Central and McCausland Aves.; McCausland Ave. between Marquette and Fyler Aves.; Beethoven Ave. between Gravois Ave. and Morganford Rd. E. R. Kinsey, comr. bd. pub. serv.

Mo., Salem—Dent Co. having plans prepared building Salem, Licking and Iron Mountain Rds. About $160,000. J. H. McDonald, clk. Noted Apr. 26.

Arkansas—State Highway Dept., Little Rock, plans to build macadam road in Carroll Co. from Eureka Springs through Green Forest and Alpena to Green Co. line, 20 mi. About $158,000.

Ark., Walnut Ridge—Lawrence Co. Rd. Impvt. Dist. No. 6, plans to build 14 mi roads to connect Portia, Black Rock, Powhattan, and Clover Bend Twps.

Tex., Albany — Shackelford Co. voted $100,000 bonds for road work.

Tex., Corpus Christi — See "Miscellaneous."

Tex., El Paso—El Paso Co. election, Dec. 30, to vote on $250,000 bonds to build roads. L. A. White, co. engr.

Tex., Fairfield — Freestone Co. election Dec. 22 to vote on $30,000 bonds to build roads in Dist. No. 9.

Tex., La Grange — Fayette Co. election Dec. 18 to vote on $100,000 bonds to build roads, Dist. No. 1.

Tex., Linden—Cass Co. election Dec. 21, to vote on $100,000 bonds to build roads, Dist. No. 7.

Tex., Mt. Vernon—Franklin Co. voted $10.000 bonds to build roads in Dist. 3; $20,000 in Dist. 4 and $11,000 in Dist. 5.

Tex., Palestine — Anderson Co. election Dec. 22, to vote on $48,000 bond issue to build roads, Dist. No. 6.

Tex., Wharton—Wharton Co. plans election to vote on $60,000 bond issue to build roads.

Okla., Cheyenne—Roger Mills Co. plans election to vote on $150,000 bonds to build roads and bridges.

Okla., Newkirk—City soon lets contract paving 24,800 sq.yd. in Dist. No. 1 and 11,250 yd. in Dist. No. 2. G. T. Carnall, clk.

Okla., Pawnee—Pawnee Co. election, Dec. 28, to vote on $30,000 bond issue to build roads and bridges.

Okla., Sapulpa—(Official)—City plans to pave, curb, grade, and build curbs, install pipes, catch basins, manholes, etc., in portions Mission St. and Lincoln Ave. R. M. Whittelsey, city engr.

N. M., Deming—City plans to pave Silver, Gold, Iron, Pine and Spruce Sts. Southern Pacific R.R. to bear part of cost.

Utah—State Highway Comn., Salt Lake City, had plans prepared building highway from Juab to Nills; also plans to extend highway through Juab and Millard Cos.

Wash., Bellingham—City Council plans to grade and build cement sidewalks and sewers in Prospect, Lottie and Dupont Sts., also grade, clear, etc., Normal Dr. from Cedar St. to 21st St. C. Lindberg, city engr.

Streets and Roads (Continued)

Wash., Colfax—Whitman Co. Comrs. plan to establish George M. Miller Rd., about 8 mi. to be known as Impvt. Rd. No. 2. J. M. McCaw, co. engr.

Wash., Garfield—City will sell $20,000 bonds to build streets and sidewalks.

Wash., North Yakima—Yakima Co. Comrs. having plans prepared for paving 5½ mi. road from Sunnyside to Outlook School.

Wash., Seattle—Bd. Pub. Wks. plans to pave Rainier Ave. et al. About $91,000. A. H. Dimock, city engr.

Wash., Waterville—(Official)—Douglas Co. plans to spend $400,000 for road and bridge work as follows: Sunset Highway, $165,000; Permanent Highway No. 4, $20,000; No. 4A, $8000; No. 5, $2000; No. 1A, $18,000; Beaver Creek Rd., $13,000; bridge over Foster Creek, $10,000; maintenance of permanent highways, $15,000, building and maintenance of district roads, $123,000; L. I. D. No. 4, $15,000. R. F. Foster, co. engr. Noted June 21.

Oregon — State Highway Comn., Yeon Bldg., Portland, rejected bids grading 1½ mi. in Wheeler Co., on Ochoco Forest Rd., 4 mi. from Mitchell, also building 90 ft. wood span bridge. Noted Nov. 22.

Ore., Corvallis—Benton Co. having surveys made for paving, grading and filling 10 mi. state highway from Corvallis to Polk Co. line.

Cal., Martinez—Contra Costa Co. having plans prepared building highway between Antioch and Oakley, Div. No. 7; also plans highway between Pittsburg and Bay Point, Div. No. 8.

Cal., Santa Barbara—La Mesa Rd Dist. voted $17,500 bonds to build 2 mi. roadway. Bd. Superv. will contribute $10,000 towards cost. Noted Nov. 22 R. H. Wheeler, secy.

Cal., Willows—Glen Co. voted bonds to build 14 mi. highway in boulevard district, Hamilton City. Noted Nov. 1.

Man., Winnipeg—Provincial Government will appropriate $10.000 to build road from Fort Alexander to Rice Lake mining dist. Noted June 21.

BIDS DESIRED

N. J., Atlantic City—Until Dec. 27, by City, filling, grading, curbing, and graveling portions Absecon Blvd. and Venice Ave.; filling in portion Clam thoroughfare, including dredging water-ways and depositing dredged material, amounting to 888,000 sq.yd., graveling 13,100 sq.yd. of driveways, 850 sq.yd. sidewalks, covering 229,000 sq.yd. outside of driveways; building 2 bridges, 40 and 80 ft. long, and 300 lin.ft. standard wood bulkhead. J. W. Hackney, city engr.

N. J., Union—Until Dec. 17, by town resurfacing portion New York Ave., bituminous concrete. E. Bautz, clk. Noted July 12.

W. Va., Webster Springs—Until Dec. 28, by Webster Co., building road from Webster Springs to Randolph Co. line, 4 mi., and from Webster Springs to Cleveland, 3 mi.

Louisiana—(Official)—Until Dec. 17, by State Bd. Engrs., New Orleans Court Bldg., New Orleans, building 16.9 mi. Alexandria-Echo sect. of Alexandria-Marksville Highway, Rapids Parish, gravel. D. Buie, state highway engr.

La., Alexandria—(Official)—Until Jan. 2, by Police Jury, Rapids Parish, building gravel roads, Dist. No. 14. About $75,000. I. W. Sylvester, engr. Noted Nov. 22.

Ohio—Until Dec. 27, by State Highway Dept., Columbus, building roads in various counties, as follows:

Ashland Co., Sect. "A." Ashland-Wooster Rd., 2.47 mi., monolithic brick, cost $64,738

Sect. "A," Ashland-Norwalk Rd., 4.72 mi., monolithic brick, $110,597;

Sect. "G" of the Savannah-Vermillion Rd., 4.08 mi., to be paved with monolithic brick, estimated cost $84,646.20.

Franklin Co., Sect. "Q." Columbus-Sandusky Rd., 1.96 mi., bituminous macadam, $38,900;

Lake Co., Sect. "J.," Cleveland-Buffalo Rd., 7.715 mi., monolithic brick-rein. con., $213,356;

Sect. "Q." Cleveland-Buffalo Rd., 5.43 mi., monolithic brick-rein. con., $150,814.29.

Lawrence Co., Sect. "K," of the Ohio River Rd., 0.97 mi. concrete, $20,026.75.

Sect. "E," Ironton-Miller Rd., 1 mi., bituminous macadam, $16,152;

Logan Co., Sect. "A-1," Bellefountaine-Lima Rd.; 0.50 mi., concrete, $13,888;

Sect. "F-1," Bellefountaine-Richwood Rd., 2.68 mi., waterbound macadam, $32,419;

Lucas Co., Sect. "K-2," Toledo-Napoleon Rd., 3.75 mi., concrete, $85,801;

Sect. "J," Toledo-Napoleon Rd., 4.48 mi., concrete and waterbound macadam, $73,334;

Mahoning Co., Sect. "Y," Canfield-Poland Rd., 1.88 mi., waterbound macadam, $24,674;

Monroe Co., Sect. "F," Barnesville-Woodfield Rd., 3.97 mi., grading B. & C., $30,326;

Muskingum Co., Sect. "Q," National Rd., 2.93 mi., brick, $103,031;

Sect. "R," National Rd., 6.15 mi., brick-concrete, $209,707;

Sect. "S," National Rd., 4.55 mi., brick or concrete, $154,403;

Ottawa Co., Sect. "K," Toledo-Elmore Rd., 0.86 mi., brick, $27,591;

Sect. "E-1," Bowling Green-Pt. Clinton Rd., 0.39 mi., brick, $12,111;

Sect. "F-1," Bowling Green-Pt. Clinton Rd., 0.25 mi., brick, $7337;

Sect. "A," Fremont-Oak Harbor Rd., 0.48 mi., brick, $13,738;

Sect. "E," Fremont-Pt. Clinton Rd., 2.40 mi., brick, $56,084;

Seneca Co., Sect. "A-1," Upper Sandusky-Tiffin Rd., 1.23 mi., brick or bituminous concrete, $35,942;

Sect. "Q," Upper Sandusky-Bellevue Rd., 2.05 mi., bituminous macadam, $30,071;

Van Wert Co., Sect. "C," Van Wert-Ft. Wayne Rd., 4.30 mi, waterbound macadam, $50,142;

Clermont Co, Sect. "I," Ohio River Rd., 4.12 mi., bituminous macadam, $26,689;

Crawford Co., Sect. "L," Galion-Bucyrus Rd., 1.79 mi., brick, $55,247;

Mercer Co., Sect. "C," Celina-Wabash Rd., 1.62 mi., concrete, $39,946;

Vinton Co., Sect. "G-2," McArthur-Athens Rd., 1.06 mi., grading, $9057.

O., Cleveland—(Official)—Until Dec. 19, by Cuyahoga Co., grading, draining and paving Front-Factory St. E. G. Krause, clk.

O., Youngstown—(Official)—Until Dec. 21, by H. Parrock, dir. of serv., paving, curbing, excav., building manholes and catch basins in Hylda, Ravenwood, and Aubindale Sts. from South Ave. to Erie St. F. M. Lillie, city engr.

Wis., La Crosse—(Official)—Until Dec. 15 by B. A. Jolivette, clk., La Crosse Co., building Hunter, North Sparta and West Salem-La Crosse Rds., involving 4825 cu.yd. rock.

Wis., Sturgeon Bay—Until Dec. 20, by J. M. Laurie, highway comr., Door Co., furnishing and delivering crushed stone for roads in 6 twps.

California—Until Dec. 24, by State Highway Comn., Sacramento, paving portion Boulevard at San Diego State Normal School; also building 11 mi. highway in Monterey Co., concrete. A. B. Fletcher, state highway engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—City let contract paving Fens Pkway. to Warren Bros., 142 Berkeley St., $17,207. Noted Nov. 29.

★Mass., Boston—City let contract building concrete walks to J. McCourt, 46 Wait St., Roxbury, $16,763.

★N. Y., New York—M. M. Marks, boro. pres. let contract regulating and grading Laurel Hill Terrace, to Burnside Contg. Co., 270 Burnside Ave., $17,457; regulating and repaving roadway of 52nd St., from 68 ft. west of Park Ave. to 5th Ave., sheet asphalt on concrete foundation, repaving roadway of Madison Ave., wood block, to Cleveland Trinidad Paving Co., Main St., Flushing, $13,101. Noted Nov. 29.

N. J., Cape May—Bd. Freeholders, Cape May Co., received lowest bid building Sect. 2, gravel road from here to Wildwood from Cassedy & Homan. About $84,879.

★Pennsylvania—(Official)—State Highway Comn., Harrisburgh, let contract building 7857 ft. State-Aid road through Cornplanter Twp., Venango Co., to J. E. Richey, S. W. Cramer and J. McSnow, Franklin, $52,888. Noted Nov. 15.

★Pa., Allentown—City let contract repairing sidewalk and roadway of Hamilton St. bridge over Lehigh River, involving 3777 sq.yd. wood-block flooring and 12,000 sq.ft. concrete, to Shaffer & Ackerman. About $35,000.

★Pa., Phila.—Fairmount Park Comn. let contract grading on site for proposed Art Museum, Old Fairmount Reservoir, to T Connor. About $20,000.

★W. Va., Fayetteville—(Official)—Fayette Co. let contract grading 3 mi. road in Kanawha Dist., involving 141,000 cu.yd. excav. and 200 cu.yd. masonry, to Henning & Hagestorn, Mullins, 73c. and $8.06 respectively. Noted Oct. 18.

★Ga., Thomasville—City let contract paving streets and building sidewalks, involving 12,000 yd. asphalt; 22,000 sq.yd. cement sidewalks; 23,700 lin.ft. concrete curb and gutter, to West Constr. Co., 10th and Market Sts., Chattanooga, Tenn.

★Ala., Opelika—Lee Co. let contract improving 11.31 mi. Opelika and Leachapoka Rd., part State Trunk Rd. No. 13, involving 51,200 cu.yd. earth excav.; 16,000 cu.yd. sand-clay surfacing, 258 cu.yd. concrete; 842 lin.ft. vitr. clay pipe, to Stanley & Singer, La Fayette, $25,500.

★La., Shreveport—City let contract paving Olive St. from 5th to 21st St. to Kennedy-Olsen Constr. Co., Kansas City, Kan., $60,000.

★Tenn., Chattanooga—Hamilton Co. plans building 1½ mi. highway on Lookout Mountain. Work will be done by convict labor. Noted Aug. 23.

★Ky., Eminence—City let contract building several streets, bituminous macadam, to Southern Asphaltoilene Road Co., 114 South 4th St., Louisville. About $10,000.

★Ky., Owensboro—Davies Co. let contract building Craves Lane Rd., Ware, Livermore, Booneville and Curdsville Twps.; also 2 sections of Hardinsburg Rd., to Montgomery, Perkins & Ellis, and Miller & Woodruff. About $161,000. Noted Nov. 15.

★Ind., Kendalville—(Official)—City let contract paving portions Main and Williams Sts., also certain alleys, to Moellering Constr. Co., Murray St., Ft. Wayne, $45,509. Noted Dec. 6.

★Ill., Rockford—City let contract paving Churchill St., to F. K. Carrico, 1109 Kilburn Ave., $11,000.

★Ia., Des Moines—City let contract paving Douglas and 58th Sts. to Wagner & Co., Union St. Noted Nov. 1.

★Minn., Worthington—(Official)—Nobles Co. let contract graveling 6 mi. Rd. No. 1801 and 6½ mi. Rd. No. 1811 to Lamoreaux Bros., 805-11 Brandeis Bldg., $17,922 plus 10%.

★Kan., Augusta—City let contract paving Augusta St., to Bessler Constr. Co., Winfield, $34,000.

Neb., Kearney—City received low bids paving 10,112 sq.yd., Dist. No. 29, with sheet asphalt from Union Paving & Constr. Co., St. Joseph, Mo., $1.75 per sq.yd.; Young Bros. Constr. Co., Excelsior Springs, Mo., $1.85; E. D. Tyner Constr. Co., Kansas City, Mo., $1.85. Noted Nov. 29.

★Mo., Carthage—City let contract paving streets to McDonald Constr. Co., Moberly, $26,000.

★Mo., Rockport—City let contract paving about 7 mi. streets to Western States Constr. Co., 782½ Brandeis Bldg., Omaha, Neb., $53,400.

★Tex., Dallas—City let contract grading Forest Ave. and building earth embankment in connection with Forest Ave. extension to Moberly & Brown, Dallas, $13,066. Noted Nov. 22.

★Tex., Texarkana—City let contract paving Olive St. from 4th to 19th Sts., about 15 blocks, to Kennedy Constr. Co. About $56,000. Noted Nov. 22.

★Okla., Sapulpa—City let contract paving Bryan and Thompson Aves., to J. E Nolan, $12,282.

★Okla., Tulsa—City let contract paving several streets, to F. P. McCormick, $325,000.

Streets and Roads (Continued)

★Oregon—State Highway Comn., Portland, let contract grading Pacific Highway between Dillard and Myrtle Creek, Douglas Co., 11 mi., to Calvert & Wolke, Grants Pass, $127,520. Noted Nov. 22.

California—State Highway Dept., Sacramento, received low bids grading 8 mi. in Mendocino Co. between Willits and Gould (State to furnish pipe railing, reinforcing steel, etc.), from Erickson & Peterson, Monadnock Bldg., San Francisco, $112,931; Bates & Portland, Crocker Bldg., Oakland, $113,199; A. J. Fairbanks, 268 Market St., San Francisco, $119,945; building 8 mi. highway in Monterey Co. between San Ardo and San Lucas, from G. S. Benson & Sons, 521 Stimson Bldg., Los Angels, $55,002. Noted Nov. 15.

★Cal, Los Angeles—City let contract grading and paving with bitulithic, building cement curbs and gutters and rein.-con. culverts in New Hampshire St. between Willshire Blvd. and 8th St., to Fairchild-Gilmore Co., Pacific Electric Bldg., $31,315.

★Cal., San Diego—City let contract improving Utah St. from Unas St. to University Ave., including 142,630 sq.ft. 4-in. concrete paving; 2896 sq.ft. cement walk; 575 lin.ft. cement curb, ten 4-in. sewer laterals, thirteen 6-in. sewer laterals, 2676 ft. 6-in. Class A water pipe, etc., to G. R. Daley, 440 McNiece Bldg., $24,707. Noted Nov. 29.

★Cal., San Francisco—City let contract building portion Hunter's Point Rd., to H. Crummey, Inc., Hearst Bldg., $17,282.

★Ont., Toronto—City let contract supplying cement for coming year to Hanover Portland Cement Co. About $2.45 per bbl.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Florida—Kissimmee River R.R., Kissimmee, organized with $100,000 capital stock. plans to build line from Walinwa to Polk Co., about 7 mi. J. A. Griffin, pres.

Texas—Dallas Ry., Dallas, plans to spend about $1,000,000 for extending and improving its lines. Among improvements to be made are following: Rebuilding double-track and paving in Oak Cliff on Jefferson Ave. from Lancaster to Polk; rebuilding track on Main St. between Poydras and Ervay; new storage tracks at Oak Cliff car barns; removal of tracks on Hickory St. between Harwood and Latimer St. and on Corinth St. between Akard and Cockrell St.; double-track extension of Oak Lawn line on Cedar Springs from Oak Lawn Ave. to Throckmorton St.; extension of Lake Ave. line from Fairmount to Oak Lawn Ave.; new line on Forest Ave.; new improvements, extensions and betterments of terminals at State Fair Grounds, etc. F. M. Bisbee, Amarillo, ch. engr.

Washington—City Council, Tacoma, voted to extend Municipal Ry. from 11th St. and Taylor Way to Lincoln Ave., about 1 mi. Cost, $20,000.

California—Municipal Ry., 2600 Geary St., San Francisco, plans to build 3 additional blocks of tracks here in order that cars on Greenwich St. may reach Baker St. entrance to Presidio and go to terminus of system in Presidio reservation. About $25,000.

EXCAVATION AND DREDGING

Proposed Work

Miss., Greenville — Drainage — Murphy Bayou D.D. recently organized plans to build system to drain 50,000 acres in Washington Co. Morgan Eng. Co., engrs., 608 Goodwyn Institute Bldg., Memphis, Tenn., making surveys.

Ill., Havana — (Official) — Drainage — Comrs. Chautaqua Drainage and Levee Dist., Mason Co., rejected all bids building drainage system; Sect. 1, Illinois River Levee, involving 1,461,000 cu.yd. embankment, 138,000 cu.yd. exploration trench; Sect. 3, planting willows for levee protection on 9-mi. graded bature-berm. H. Hahn, comr. Work will be readvertised. Noted Nov. 5.

Ia., Corning—Drainage—Adams Co. having preliminary surveys made by Price & McCormick, engrs., for East Nodaway Drainage Project; involving 500,000 cu.yd. excav. F. W. Yeadon, co. aud.

Minn., Montevido — (Official) — Ditch — Chippewa Co. rejected all bids received Dec. 1, building Co. Ditch No. 22. J. J. Stennes, co. aud. Noted Nov. 22.

Cal., Sacramento—Ditch—State Reclamation Bd. approved plan to build drainage ditch on lower Cosumnes River. About $10,000.

BIDS DESIRED

Ia., Jefferson—Drainage—Until Dec. 17. by Greene and Webster Cos., furnishing tile for joint D. D. No. 221, involving 104,440 ft. 5-36-in. tile, 300 ft. sewer pipe, etc. B. S. McCully, aud. Greene Co., J. L. Hanrahan aud., Webster Co.

Ark., Pine Bluff—Drainage—Until Dec. 20, by Comrs. Flat Bayou D.D., Jefferson Co., at office of Parkes Eng. Co., engrs., 203 Citizens Bank Bldg., Pine Bluff, building main and lateral ditches, involving 695,519 cu.yd. excav. J. H. Quattlebaum, comr. Noted July 12.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract

N. Y., New York—Excavation—F. J. H. Kracke, comr. plant and structures, Municipal Bldg., received low bids excavating and dredging at site of Eastchester Bridge from P. T. Coy Contg. Co., 150 Nassau St., $9770; Rodgers & Hagerty Co., 103 East 125th St., $9800. Noted Nov. 29.

★Minn., Litchfield—(Official) — Ditch—Meeker Co. let contract building Co. Ditch No. 47 to Duffy & McGraw, Litchfield, $22,250. Noted Nov. 29.

★Minn., Minneapolis—Ditch — Hennepin Co. let contract building Co. Ditch No. 30, involving 55,569 cu.yd. excav., to Carroll & Cowan, Minneapolis, 27.5c. per cu.yd.

Kan., Salina—(Official)—Drainage—Bd. Supervs. D.D. No. 1, Salina Co., received bids building drainage system, involving 87,250 cu.yd. excav., etc., from P. C. Buskirk, Hutchinson, $0.14⅓ per cu.yd. (recommended for acceptance); time, 180 days; H. E. Badger, Omaha, Neb., $0.15 on line (a) and (b); cost plus 15% on remainder; 100 days; A. L. Cook, Ottawa, $0.19. Noted Nov. 15.

★Tex., Barstow — Irrigation — Ward Co. Irrigation Dist. No. 1 let contract building irrigation canal in Dist. No. 1, to W. E. Hamilton, Ft. Stockton. About $21,198. Noted Nov. 15.

INDUSTRIAL WORKS

Proposed Work

R. I., Warren—Warren Mfg. & Exporting Co. plans 3-story, 100 x 180-ft. addition, North Main St. and Pleasant Pl. About $75,000.

N. Y., Brooklyn—D. F. Edgerly, 378 7th Ave., had plans prepared for 1-story, 101 x 107-ft. brick garage, Nostrand Ave. near Montgomery St. About $30,000.

N. Y., Buffalo—Automatic Transportation Co., 2933 Main St., plans 2-story, 35 x 150 ft. machine shop.

N. Y., Buffalo—G. Lang Brewery Co., 400 Best St., had plans prepared by J. C. Schultz, archt., 1370 Main St., for 2-story, 60 x 88-ft. bottling plant, 397 Dodge St. About $25,000.

N. Y., Long Island City—First Ward Ice Co., 9th Ave., had plans prepared by F. Korfman, archt., 409 9th Ave., for 2-story, 125 x 200-ft. addition to plant and garage. About $35,000.

N. Y., New York — Sussman Holding Corp., 448 East 167th St., having plans prepared by C. Schaefer, archt., 529 Courtland St., for 2-story, 98 x 108-ft. garage. About $30,000. B. Sussman, pres.

N. Y., Utica — Utica Steam Engine & Boiler Wks., 726 Whitesboro St., had plans prepared by C. Kiehm, archt., Gardener Bldg., for 1-story, 46 x 96-ft. factory. About $88,500.

N. Y., Watertown—Water Bd. had plans prepared by S. M. Greene Co., archts. and engrs., 293 Bridge St., Springfield, Mass., for power plant. About $300,000. J. W. Knowlton, pres.

N. J., Elizabeth—W. A. Clark Wire Co. had plans prepared for 2-story, 105 x 177-ft. machine shop. About $100,000.

N. J., Irvington—Irvington Varnish & Insulator Co., 218 East Speedway Ave., plans 1-story brick factory. About $25,000.

N. J., Jersey City—Hudson Co. Blvd. Com. plans to improve and enlarge lighting plant at Snake Hill. About $150,000. F. Hogue, comr.

N. J., Jersey City—Jersey City Co-Operative Bakers' Assn. having plans prepared by G. A. Flagg, archt., Spingarn Bldg., fot 1-story, 100 x 190, and 2-story, 40 x 100-ft. brick and terra cotta warehouse. About $40,000. F. Frasch, 123 Harrison St., Hoboken, pres.

N. J., West Orange—Edison Storage Battery Co., Valley Rd., has increased capital stock from $3,500,000 to $5,000,000 and plans addition.

Pa., Pittsburgh—W. Harley, Brookline Blvd., soon lets contract for storage warehouse. About $35,000. C. R. Geisler, Hostetter Bldg., archt.

Del., New Castle—Wilmington Fibre Specialty Co. plans to rebuild its plant recently destroyed by fire. About $200,000.

Del., Wilmington — Pyrites Co., Ltd., Christiana Ave., plans to rebuild factory recently destroyed by fire. About $75,000.

W. Va., Charlestown—Powhatan Brass Fdry. & Iron Wks. soon lets contract for 1-story addition. A. B. Mullett & Co., Union Trust Bldg., Washington, D. C., archt.

N. C., Elizabeth—Elizabeth City Hosiery Mill Co. plans mill. About $50,000. P. H. Williams, supt.

S. C., Mt. Pleasant—Southern Shipbuilding Co., organized by New York capitalists, issued $250,000 bonds, and plans factory.

Ga., Savannah—Schaffer Baking Co. soon lets contract for 4-story, 60 x 90-ft. plant. About $45,000. C. D. Cooley Co., Century Bldg., Pittsburgh, archts. and engrs.

Ala., Birmingham—Natl. Steel Products Co., plans factory, 8th Ave., between 26th and 28th Sts. About $25,000. R. S. Bohannon, pres.

Ky., Louisville — Reciprocating Electric Tool Co., incorporated with $100,000 capital stock, plans to build factory. J. J. Roberts, 412 Courier-Journal Bldg., in charge.

O., Akron—A. B. Smith Piano Co., 270 Main St., soon let contract for 7-story factory. About $100,000. W. C. Owen & Co., 1900 Euclid Ave., archts.

O., Barberton—Portage Rubber Co., West Barberton St., has increased its capital stock from $3,000,000 to $10,000,000 and plans to build additions to its plant. A. Wildman, genl. mgr.

O., Bedford—Wheeling & Lake Erie R.R., Cleveland, acquired 100 acre site here and plans to build large freight yards. W. L. Rohbock, ch. engr.

O., Cincinnati—T. Foeld, c/o Ferro Concrete Co., archts., 9th and Harriet Sts., plans 3-story, 50 x 150-ft. service and sales station.

O., Cincinnati—Seaton Realty Co., East 4th St., plans 3-story, brick and concrete garage, 1024-36 Gilbert Ave. About $30,000.

O., Cleveland—Cleveland Bldrs. Supply Co., Leader News Bldg., purchased tract of land on lake front, and plans to build concrete dock warehouse and other buildings.

O., Cleveland—J. Heller, 2326 Lorain Ave., soon lets contract. 3-story, 40 x 135-ft. factory and store, 1909 West 25th St. About $50,000. W. Markowitz, 403 United Bank Bldg., archts.

O., Dayton—Pennsylvania Lines West of Pittsburgh, purchased 18 lots near Freemont Ave. and Walnut St., and plan to build freight depot here. About $114,000. T. Rodd, Pittsburgh, ch. engr.

O., East Cleveland—(Cleveland P. O.)—Cleveland Tractor Co., Euclid and Lamb Aves., soon lets contract for 2-story, 225 x 575-ft. factory. About $300,000. G. S. Rider & Co., Century Bldg., Cleveland, archts.

Industrial Works (Continued)

O., Lakewood—Motor Service Co., recently incorporated with $150,000 capital stock, purchased site at Detroit and Newman Sts., and plans 2-story garage and service plant.

O., Warren—Warren Tribune Co. soon lets contract for 2-story, 35 x 100-ft. printing plant here. About $30,000. Miller & Son, Dollar Bank Bldg., archts.

Ind., Anderson—Remy Electric Co. having plans prepared by Schenck & Williams, archts., Arcade Bldg., Dayton, for two 4-story, 50 x 300 and 60 x 312-ft. factories. A. Atwood, gen. mgr.

Ind., Indianapolis—The Weidely Mfg. Co., Georgia and Shelby Sts., has increased its capital stock from $600,000 to $1,100,000 and plans to build an addition to its plant.

Ind., Richmond — Pennsylvania Lines West Pittsburgh soon lets contract freight depot, machine and paint shops. About $125,000. Thos. Rodd, Union Station, Pittsburgh, ch. engr. H. Foltz, 1456 Lemcke Annex, Indianapolis, archt.

Mich., Carrolton—Saginaw Shipbuilding Co. plans to increase capital stock from $350,000 to $500,000 and build addition.

Mich., Detroit—American Car & Foundry Co. plans 1-story, 160 x 195-ft. artillery machine shop and assembling plant addition. About $30,000. J. H. Ames, 445 East Ferry Ave., constr. engr.

Ill., Chicago—Hotpoint Electric Heating Co. plans factory. About $250,000. J. R. Richardson, mgr.

Ill., East Alton—Consolidated Chemical Products Co., soon lets contract for 4-story, 100 x 200-ft. factory. About $150,000. I. W. Brandle, c/o Alton Bd. Trade, Alton, mgr. J. W. Randell, Alton, engr.

Ill., Springfield—Illinois Watch Co., 9th St. and North Grand Ave., plans 4-story, 40 x 146-ft. factory on 9th St.

Ia., Keokuk—Standard Four Tire Co. plans to increase its capital stock to $3,500,000 and build 80 x 400 ft. factory. C. J. Kirch, pres.

Kan., Salina—Butzer Packing Co. increased its capital stock to $450,000, and plans to build several additions. W. Butzer, pres.

Kan., Salina—Robinson Milling Co., recently incorporated, having plans prepared for mill and elevator. About $250,000. Address C. E. Robinson.

N. D., Valley City—City plans to build heating plant. About $60,000. W. Doud, 39 West Van Buren St., Chicago, engr.

Mo., St. Louis—Dazley Churn Mfg. Co., 4301 Warne Ave., soon lets contract for 2-story, 125 x 200-ft. factory. About $45,000. O. KuBatzky, 6240 Arundel Pl., archt.

Mo., Sedalia—Swift & Co., Union Stock Yards, Chicago, having plans prepared by H. H. Jilson, archt., for 4-story addition to packing plant. About $150,000.

Ark., Pine Bluff—H. C. Couch, D. B. Niven and E. B. Bloom, all of Pine Bluff, will organize company with $100,000 capital stock and build cotton mill here.

Tex., Amarillo—City plans election to vote on $200,000 bond issue to build electric light plant.

Utah, Salt Lake City—F. C. Richmond Machine Co., 117 West 2nd St., plans 2-story rein.-con. warehouse. About $90,000.

Ore., Pringle Falls—White Pine Lumber Co., Bend., had plans prepared for lumber mill, and hydro-electric power plant. About $140,000.

Cal., Santa Barbara—City plans to build power plants at Mission and Gibralter Canyons. About $146,368 and $66,000 respectively.

Que., Montreal—Dominion Cement Co., 92 Notre Dame St., E., plans to build large cement plant. About $100,000. J. A. Vinet, secy. treas.

Ont., Paris—Alabastine Co., William St., plans to rebuild factory recently destroyed by fire. About $35,000.

Ont., Sarnia—Holmes Fdry. Co. plans to build plant here. About $70,000.

B. C., Maillardville — Canadian Swift Packing Co. plans plant here. About $750,000.

BIDS DESIRED

N. Y., Bedford Hills—(Official)—Until Dec. 14, by W. G. Barrett, pres. bd. mgrs., New York State Reformatory for Women, remodeling present laundry building for meat storage and refrigerating equipment; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Edison Electric Illuminating Co., 39 Boylston St., let contract 5-story substation on Chauncey St., to G. E. Macomber Co., 44 Bromfield St.

Conn., Middletown—Mattabosset Brewing Co., c/o S. P. Moscalitts, 84 Veteran St., Meriden, received lowest bid building 5-story, 80 x 88-ft. concrete brewery, from S. Mazzota, 90 Spring St., $75,000. Noted Oct. 11.

★N. Y., Brooklyn—See "Buildings."

★N. Y., Brooklyn—L. Leavitt, 454 Driggs Ave., let contract, 3-story, 100 x 125-ft. brick factory, Driggs Ave. and North 11th St. to Selberman, Schampain Co., 104 West 42nd St., New York City, $70,000.

★N. Y., Central Islip—State Hospital Comn., Albany, let contract building power house, to B. Raynor, Locust Ave., Islip, $150,000. Noted Nov. 8.

★Pa., Carnegie—Aetna Chemical Co. let contract building power house and 100-ft. radial brick stack, to W. W. Lindsay Co., Harrison Bldg., Phila.

★Pa., Masontown—Youngstown Sheet & Tube Co., Youngstown, O., let contract coal development plant to Dravo Contg. Co., Diamond Bank Bldg., Pittsburgh, $1,500,000.

★Pa., Phila.—A. Schoenut & Co., Adams and Sepviva Sts., let contract for 1-story, 58 x 140-ft. lumber yard, and 40 x 89-ft. kiln building to P. Haiback Contr. Co., 26th and Thompson Sts., $50,000. Noted Dec. 6.

★Del., Wilmington — (Official) — Atlas Powder Co. let contract sulphuric-acid plant at Forcite, N. J., including 92 x 100-ft. absorber house, 94 x 110-ft. burner and purification house, 28 x 30-ft. blower house and 62 x 126-ft. preheater and converter house to Austin Co., 14230 Euclid Ave., Cleveland, O.

★Md., Baltimore—(Official)—Amer. Propeller & Mfg. Co., 233-49 East Hamburg St., let contract 1 story, 150 x 200 ft. factory on Key Highway, to Price Constr. Co., Maryland Trust Bldg. About $50,000. Item in issue of Dec. 6 an error.

★O., Cleveland—Natl. Carbon Co., 117th St. and Madison Ave., let contract 3-story, 40 x 100-ft. factory, to Honkin Conkey Constr. Co., Cuyahoga Bldg., $60,000.

★O., Columbus—Scioto Rubber Co., 373 5th Ave., let contract 1-story, 213 x 166-ft. addition to Frankenberg Constr. Co., 705 Columbus Savings & Trust Bldg., $50,000.

★O., Youngstown—Amer. Sintering Co., 10 Poland Ave., let contract rebuilding plant recently destroyed by fire, to Stone & Webster, 511 Stambaugh Bldg. New building will be 6 stories. Noted Nov. 29.

★Ind., La Fayette—Indiana Lighting Co., 6th and Ferry Sts., let contract for 2-story addition, to A. E. Kemmer, 644 North 7th St., $25,000.

★Wis., Menasha—Menasha Wire & Mfg. Co. let contract, 2-story, 44 x 107-ft. factory to A. Bluehl, 424 2nd St. About $25,000. Noted Nov. 22.

★Wis., Milwaukee—Milwaukee Forge & Machine Co., 224 Lake St., let contract for 2 brick and concrete shops, to Northwestern Bridge & Iron Co., 127 South Water St., $60,000. Noted Nov. 15.

★Tex., Port Arthur—Port Arthur Cooperage Co. let contract 100 x 100-ft. frame and concrete factory, to Secrest Constr. Co., Port Arthur.

★Okla., Oklahoma — McClelland-Gentry Motor Co., 725 North Bway., let contract for 3-story, 75 x 140-ft. brick and rein.-con. garage, 8th St. and Bway., to Campbell & Price, 610 Majestic Bldg. About $85,000.

★Wash., Seattle—Fidalgo Island Packing Co. let contract for factory to M. J. Johnson, Lesch Park, $35,000.

★Wash., Spokane—Sperry Flour Co., 66[illegible] Mallon St., let contract building m[illegible] to Burrell Eng. Co., 323 South La Sal[illegible] St., Chicago, $350,000. Noted Nov. 1.

★Wash., Tacoma—Griffith Motor Co., Bway., let contract for 3-story, 50 x 1[illegible]-ft. brick and concrete garage and sale[illegible]om to J. E. Bonnell, 760 Commerce St., $[illegible]

★Cal., Los Angeles—Amer. Can Co., 801 Santa Fe St., let contract 1-story, [illegible] x 391-ft. addition to warehouse, to Leo[illegible]rdt & Peck, 72 H. W. Hellman Bldg. About $40,000. Noted Dec. 6.

★Que., Maisonneuve — J. I. Choui[illegible]rd, 330 Notre Dame St., E., Montreal, let contract for factory here, to A. Gratton, 142 5th Ave., about $100,000.

★Ont., Galt—Canada Machinery Corp., Concession and Water St., S., let contract addition to foundry to P. H. Secord & Son, Sydenham Bldg., Brantford, $30,000.

★Ont., Toronto — Toronto Type Co., 70 York St., let contract for warehouse, to S. L. Yolles, Confederation Life Bldg., about $75,000.

★B. C., Vancouver—See "Buildings."

BUILDINGS

Proposed Work

Mass., Randolph—Hospital—Norfolk Co. Dedham, plans tuberculosis hospital on Canton St., here. About $150,000.

Conn., Hartford—School—Bd. Educ. having plans prepared by E. T. Wiley, archt., 75 Pratt St., for addition to Wilson School.

Conn., New Haven — Temple — Masonic Temple Assn. had plans prepared by C. F. Townsend, archt., 129 Church St., for 3-story, brick and marble, York St.

Conn., Waterbury — School — Bd. Educ. had plans prepared by J. T. Smith, archt., 36 North Main St. About $60,000.

N. Y., Brooklyn—Hospital—Zion Hospital, 2140 Crospey Ave., plans to build new hospital at 45th St. near 17th Ave. L. D. Greenfield, pres.

N. Y., New York—Y. M. C. A. having plans prepared by J. F. Jackson, archt., 1328 Bway., for 6-story, brick and stone, 179 West 135th St. About $100,000. Address Dir. Y. M. C. A., 215 West 23rd St.

N. Y., New York—Y. W. C. A. having plans prepared by J. J. Petit, archt., 103 Park Ave., for 6-story, 100 x 150-ft. brick and stone, 137th St. near 7th Ave. J. S. Cushman, 600 Lexington Ave., pres.

N. J., North Bergen—School—Bd. Educ. having plans prepared by Hensel & Weir, archts., 809 Savoye St., West Hoboken, for 2-story, 130 x 140-ft. brick and terra cotta. About $60,000. O. Smith, Town Hall, pres.

Pa., Chadd's Ford—School — Bd. Educ. having plans prepared by V. T. Ritter, archt., North American Bldg., Phila., for 2-story, 85 x 150-ft. brick.

Pa., Chester—Manual Training School—Bd. Educ. plans 4-story. About $300,000.

Pa., Roxborough — Hospital — St. Timothy's Memorial Hospital plans to issue $50,000 bonds to build addition.

S. C., Rock Hill—Church — 1st Baptist congregation plans. About $70,000. J. P. Tucker, pastor.

O., Akron — (Official) — Schools — Bd. Educ. to sell $125,000 bonds Dec. 27, to build schools. J. F. Barbhart, clk.

O., Akron—Theater—L. O. Beck, 333 Akron Savings & Loan Bldg., representing company, had plans prepared by A. H. Good, archt., 511 Flatiron Bldg., to construct theater. About $600,000. Gehres & Ritchie, 335 Akron Saving & Loan Bldg., survs.

O., Cincinnati—Banquet Hall and Auditorium—City having plans prepared by Elzner & Anderson, archts., Citizens Bldg. About $125,000.

O., Cleveland — Store — See "Industrial Works."

O., Columbus—Hotel and Store—Grant Realty Co., 1010 Hayden Bldg., soon lets contract 12-story, 62 x 93 ft. About $350,000. M. Peterman, Gobey Bldg., archt.

Buildings (Continued)

O., Dayton—Church, Etc.—Holy Family Congregation having plans prepared by W. L. [illegible]kle, archt., 1300 U. B. Bldg., and Prof. Murphy, 1413 8th St., Wash., D. C., associate archt. About $85,000.

O., Deshler—Grade and High School—Bd. Educ. having plans prepared by C. W. Bellman, archt., 812 2nd Natl. Bank Bldg., Toledo, for 2-story, 70 x 117 ft. About $60,000.

O., Hubbard—High and Grade School—Bd. Educ. lets contract in January for 2-story. About $110,000. Miller & Son, Dollar Bank Bldg., Youngstown, archts. Noted June 7.

O., Lima—Community House—Redemptorist Fathers, 1201 North Main St., soon let contract, 3-story, 101 x 146-ft. J. G. Behr, rector. A. C. De Curtins, 503 Opera House Blk., archt.

O., Toledo—Exchange—Central Union Telephone Co., 1042 Nicholas Bldg., having plans prepared by Mills, Rhines, Bellman & Nordhoff, archts., 1234 Ohio Bldg., for 2- and 3-story, 50 x 120 ft., Geneva and Arlington Sts. About $110,000. A. J. Mellon, dist. mgr.

Ind., Indianapolis—Hospital—City had plans prepared by A. Scherrer, Sr., archt., for 2-story, brick and concrete. About $90,000.

Wis., Kenosha—Hospital—Dominican Sisters, 322 Congress St., having plans prepared by White, White & White, 414 Pub. Serv. Bldg., archts. About $100,000.

Wis., Milwaukee—Sanatorium—Milwaukee Co. Comrs. having plans prepared by Marshall & Fox, archts., 706 Lincoln Pkwy., Chicago, for Muirdale Sanatorium. About $75,000. L. G. Widule, co. aud.

Wis., Washburn—Sanatorium—Ashland and Bayfield Co. Bds. appropriated $100,000 to build sanatorium.

Ia., Archer—School—Bd. Educ. had plans prepared by Marten & Sutherland, archts., Security Bank Bldg., Storm Lake, for 2-story. About $50,000.

Ia., Emmetsburg—Hotel—Business Men's Comn. having plans prepared by Sawyer & Watrous, archts., 303 Watrous Blk., Des Moines for 3-story, 72 x 120-ft. brick and rein.-con. About $60,000. S. C. Irvine, pres.

Ia., Pella—Dormitory, Auditorium, Etc.—Central College plans, brick and stone. About $125,000.

Minn., Duluth—School—Bd. Educ. plans to build, 8th Ave. and East 13th St. About $100,000. Croff & Boerner, archts.

Minn., Lakefield—High and Manual Training School—Bd. Educ. soon lets contract. K. T. Snyder, 933 Plymouth Bldg., Minneapolis, archt.

Minn., New Ulm—City Hall—City voted $50,000 bonds to build city hall. W. Backner, city clk. Noted May 31.

Minn., St. Paul—Church—St. Mark's Congregation had plans prepared by J. T. Comee, archt., Reshaw Bldg., Pittsburgh, for 1-story, 70 x 135-ft. About $100,000. J. A. Corrigan, 1996 Marshall Ave., pastor.

Kan., El Dorado—Hotel—North American Hotel Co., Bee Bldg., Omaha, Neb., plans 7-story, brick and rein.-con. About $300,000. Bankers' Realty Investment Co., Bee Bldg., Omaha, Neb., archts.

Kan., Kansas City—Stations—Kansas City Terminal Ry. Co. soon lets contract for 2 passenger stations. About $50,000. J. V. Hanna, 209 Union Station, Kansas City, Mo., ch. engr.

Kan., Peabody—High School—Bd. Educ. soon lets contract for 2-story, 65 x 110-ft. addition. About $50,000. G. W. Van Meter, 604 Murdock Bldg., Wichita, archts. Noted Nov. 29.

Mo., St. Joseph—Store—J. Geiger, M. D., 611 Francis St., plans 5-story, 107 x 123-ft., brick, stone and rein.-con. About $200,000. W. Boschen, Tootle-Lemon Bank Bldg., archt.

Tex., Wichita Falls—Asylum—State soon lets contract building Northwest Texas Insane Asylum here. About $400,000.

Okla., Tulsa—Bank and Office—1st Natl. Bank, c/o Rush, Endicott & Rush, archts., 226-27 Unity Bldg., soon lets contract, 10-story, 50 x 140 ft. About $500,000.

Idaho, Caldwell—Office—C. H. Sebree having plans prepared by R. E. Field, archt., for 5-story. About $80,000.

Ariz., Phoenix—Hospital—Deaconness Hospital having plans prepared by N. F. Marsh, archt., 211 Bway., Central Bldg., and C. O. Wallingford, assoc. archt., Phoenix, for 2-story, 40 x 60-ft. rein.con. hospital with 40 x 120 ft. wings. About $75,000.

Wash., Seattle—Library—Bd. Regents, State University, Stuart Bldg., Seattle, plans. About $100,000.

Wash., Tacoma—Y. M. C. A. having plans prepared by G. W. Bullard, archt., Provident Bldg., for 6-story, 49 x 120-ft. and 2-story, 50 x 50-ft. addition, Market St. About $75,000.

Cal., San Francisco—See "Miscellaneous."

BIDS DESIRED

N. Y., Brooklyn—Court House—Until Dec. 18, by L. H. Pounds, boro. pres. altering and improving Kings Co. Court House, Fulton and Livingston Sts.

N. Y., Brooklyn—Hospital—Until Dec. 19, by State Hospital Comn., Capitol, Albany, building chronic building and dining room at Brooklyn State Hospital. Cost between $150,000 and $200,000. E. S. Elwood, secy. L. F. Pilcher, Capitol, Albany, state archt.

N. Y., Syracuse—School—Until Dec. 24, by Bd. Educ. rebuilding Porter School, 2- and 3-story, 512 Emerson Ave. About $320,000: G. H. Fairchild, pres. G. Wright, Union Bldg., archt. Noted Sept. 13.

N. Y., Wingdale—(Official)—Prison—Until Jan. 10, by Comn. New Prisons, Hall of Records, Bldg., Centre and Chambers Sts., New York City; advertised in this issue.

Pa., Harrisburg—High School—Until Dec. 21, by Bd. Educ., building 1- and 3-story, 40 x 100-ft. addition. About $60,000. D. B. Hammelbaugh, 121 Chestnut St., secy. M. I. Kast, 122 Market St., archt.

Ga., Milledgeville—(Official)—Sanitarium—Until Dec. 19, by Bd. Trustees Georgia State Sanitarium. Noted Nov. 1.

Minn., Austin—Hospital—Until Dec. 17 by St. Olaf's Hospital, 908 Lansing St., 3-story, 44 x 100-ft., brick and rein.-con. About $50,000. C. C. Sedgwick, Lumber Exch. Bldg., Minneapolis, archt. Noted Nov. 22.

Minn., Dodge Center—Home—Until Jan. 8, by G. L. Taylor, aud. Dodge Co., Montonville, 2-story, 40 x 100-ft. brick Home for Poor. About $50,000. Alden & Harris, 1011 Ex. Bank Bldg., St. Paul, archts. Noted Oct. 18.

Mont., Twin Bridges—Dormitory—Until Dec. 21, by C. T. Stewart, secy. bd. examiners, Helena, building dormitory at State Orphans' Home. F. F. Wilson, Bozeman, archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. H., Nashua—High School—Bd. Educ. let contract 3-story, 152 x 183-ft. brick and stone, school and auditorium, to Nashua Bldg. Co., Nashua, $200,000. Noted Nov. 29.

★N. Y., Brooklyn—Office, etc.—New York Dock Co., ft. Montague St., let contract. 2-story, 49 x 115-ft. office building, and 1-story, 30 x 310 x 20 x 200-ft. freight shed, to Turner Constr. Co., 242 Madison Ave., New York City, $75,000.

★N. Y., Brooklyn—Theater—Putnam Theatrical Corp., 1493 Bway., New York City, let contract to Fleischman Constr. Co., 531 7th Ave., New York City, $600,000.

N. Y., New York—Infirmary—Dept. of Correction received bids Dec. 10, completion of alterations to south wing and central west wing of workhouse, Blackwells Island, from Rangeley Constr. Co., Inc., 405 Lexington Ave., $102,162; Marble Arch Co., 216th St. and Bway., $109,500; Pershing Constr. Co., Inc., New York City, $113,790. Noted Oct. 11.

★N. Y., New York—Office—New Jersey Zinc Co., 55 Wall St., let contract on Front St. and Maiden Lane, to W. L. Crow Constr. Co., 103 Park Ave. Noted Oct. 18.

★N. Y., Pomfert—Hospital—Newton Memorial Hospital let contract, 2- and 3-story, brick and concrete, to E. J. Bailey, Brocton, $135,000. Noted Sept. 6.

★O., Cleveland—Office—Smythe Bldg. Co., Erie Bldg., let contract, 2-story, 95 x 130-ft. brick and steel, Euclid and East 4th Sts., to A. M. Allen & Co., 1900 Euclid Ave. Cost, between $300,000 and $325,000.

★Ind., Lafayette—Hospital—Bd. Dir. Home Hospital let contract 4-story, to A. E. Kemmer, Lafayette. About $115,000. Noted Sept. 20.

★Ia., Iowa City—Office and Store—F. A. Dey Estate, c/o C. Dey, 507 North Clinton St., let contract to C. Franklin, 510 South Gilbert St. About $50,000.

★Minn., Rochester—Sanitarium—Kahler Roberts Corp., c/o J. H. Kahler, Zumbro Hotel Co., let contract 4-story, to G. Schwartz, Stebbens Bldg.

★Okla., Tulsa—Theater and Office—O. W. Edwards, c/o J. C. Thompson, archt., 220 Iowa Bldg., let contract building 10-story, 80 x 190 ft., to Stone Co., Inc., 310 Bank Commerce Bldg., Toledo, O., $500,000.

Wash., Tacoma—Store—See "Industrial Works."

★Cal., Alameda—Theater—J. Hamblen let contract to G. W. Stewart, 3010 Central Ave. About $65,000.

★Ont., Galt—Bank—Merchants Bank, Montreal, let contract, 2-story, to Schultz Bros. Co., Ltd., 17 Albion St., Brantford. $60,000.

★B. C., Vancouver—Depot, Etc.—Canadian Northern Ry. let contract building depot, rein.-con. platforms and train sheds, at False Creek, to Northern Constr. Co., Ltd., 606 Union Bank Bldg., Winnipeg, and Carter-Halls-Aldinger Co., 1010 Union Bank Bldg., Winnipeg, $1,000,000 and $150,000 respectively.

FEDERAL GOVERNMENT WORK

Proposed Work

Pa., Fort Mifflin—Wooden Pier and Bulkhead—Bureau Yards and Docks, Navy Dept., Wash., plans to build wooden pier and bulkhead. About $30,000; Specification No. 2735.

Wash., D. C.—Magazine Buildings and Steel Houses—Bureau Yards and Docks, Navy Dept., plans to build 3 magazine buildings and 2 steel houses at St. Julien's Creek. About $15,000; Specification 2741.

Wyo., Buffalo—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Nov. 30. Same was in excess of appropriation. Noted Dec. 6.

Wash., Puget Sound—(Bremerton P. O.)—Buildings—Bids will soon be received at Navy Yard, Puget Sound, for extension to Building No. 102. Specification 2738.

BIDS DESIRED

N. Y., Brooklyn—Electric Traveling Cranes—Until Jan. 7, by Bureau Yards and Docks, Navy Dept., Wash., installing electric traveling cranes in machine shop. Navy Yard. About $76,000. Specification No. 2720. Noted Nov. 20.

N. Y., Owego—Post Office—Until Jan. 14, by J. A. Wetmore, superv. archt., treas. dept., Wash.; advertised in this issue.

Md., Indian Head—Extension to Power House—Until Dec. 17, by Bureau Yards and Docks, Navy Dept., Wash., building extension to power house. About $29,000; Specification No. 2722. Noted Dec. 6.

Wash., D. C.—Electric Traveling Cranes—Until Dec. 17, by Bureau Yards and Docks, Navy Dept., Wash., furnishing under Specification No. 2734, electric traveling cranes at navy yard.

Wash., D. C.—Tower and Buildings—Until Dec. 17 (extension of date), by Bureau Yards and Docks, Navy Dept., building range-finding tower and reconstructing buildings Nos. 105 and 112; Specification No. 2680. Noted Dec. 6.

Wash., D. C.—Wreck Removal—Until Dec. 21 by U. S. Eng. Office, 305 Southern Bldg., removing wreck of Barge Tangier from York River, Va.; advertised in this issue.

Federal Government Work (Continued)

Fla., Jacksonville — Jetty Work — Until Jan. 5, by U. S. Engr. Office, Masonic Temple, Jacksonville, furnishing about 62,000 tons stone and raising outer portion of jetties at entrance to St. Johns River, Fla.

Tenn., Memphis—Steel Barge—Until Dec. 17, by Mississippi River Comn., 1st and 2nd Dists., Customhouse, Memphis, building and delivering 1 steel barge No. 1719; advertised in this issue.

Cal., San Diego—Fuel Oil System—Until Dec. 24, by Bureau Yards and Docks, Navy Dept., Wash., installing fuel-oil system (addendum "C"); Specification No. 2562.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

R. I., Newport—Garage—Bureau Yards and Docks, Navy Dept., Wash., received bids Dec. 10, building at Naval Training Sta., (a) work complete; (b) amount added or deducted from (a) for addition or deduction of one 13-ft. bay, from T. F. Pheer, 159 Washington St., N., Newport, (a) $11,997; (b) add $1000; J. A. Monroe, North Attleboro, Mass., (a) $13,315; (b) add $1,800, deduct $1400; Darling-Slade Co., Contrs. Bridge, Newport, (a) $13,720; (b) add $1700. Noted Nov. 29.

★Conn., New Haven—Storehouse and Garage—Bureau Yards and Docks, Navy Dept., Wash., let contract building at Submarine Base, Sect. 1, to M. J. Gibbud Co., 107 Water St., New Haven, $3516.

Conn., New London—Cranes — Bureau Yards and Docks, Navy Dept., Wash., received bids Dec. 10, installing at Submarine Base, (a) 3 cranes complete; (b) one 5-ton crane; (c) one 2-ton and 1-ton crane, from N. B. Payne, New York City, (b) $7500; (bid informal, no certified check); Chesapeake Iron Wks., West Port, Md., (b) $10,800; Cameron Engr. Co., East Stroudsburg, Pa., (c) $900. Noted Nov. 29.

★Conn., New London—Removing Wall—Commander Submarine Base, New London, let contract removing wall to B. E. Savage, 30 Dewey St., Worcester, Mass., $3700. Noted Nov. 29.

★N. Y., Brooklyn—Fitting Out Cranes—Bureau Yards and Docks, Navy Dept., Wash., let contract one 350-ton fitting-out crane to be installed in Navy Yard, here, to McMyler-Interstate Co., Bedford, O., $841,125. Noted Nov. 29, under "Wash., D. C."

★N. J., Lake Denmark—Fencing—Bureau Yards and Docks, Navy Dept., Wash., let contract fencing U. S. machine building, to Anchor Post Iron Wks., 165 Bway., New York City, $47,372. Noted Dec. 6.

Pa., Ft. Mifflin—Ammunition Box Repair House and Central Heating Plant—Bureau Yards and Docks, Navy Dept., Wash., received bids building at Ammunition Depot, (a) work complete; (b) amount deducted from (a) using asbestos roofing in lieu of roofing as specified; (c) amount deducted or added from (a) for steel stack in lieu of radical brick stack, from W. R. Dougherty, 1608 Sansom St., Phila., (a) $37,457; (b) add $600 to (a); (c) deduct $400 from (a); Wark Yardley Co., 1737 Filbert St., Phila., (a) $47,668; (b) add $320; (c) deduct $500; Dawson Constr. Co., May Bldg., Pittsburgh, (a) $53,350; (b) add $275; (c) deduct $560. Noted Nov. 22.

Pa., Ft. Mifflin—Marine Barracks—Bureau Yards and Docks, Navy Dept., Wash., received bids building at Naval Station: (a) work complete; (b) substituting No. 10 copper clad steel wire with double braid weatherproof insulation from Dawson Constr. Co., May Bldg., Pittsburgh, (a) $66,000; (b) $64,200; Snare & Triest Co., 233 Bway., New York City, (a) $84,600; (b) $85,100; W. Linker Co., 831 Cherry St., Phila., (a) $73,300; (b) $73,300. Noted Nov. 22.

Pa., Ft. Mifflin — Office — Bureau Yards and Docks, Navy Dept., Wash., received bids (a) work complete; (b) substituting air-lock brick for stuccoed hollow terra cotta tile; (c) substituting common brick for stucco hollow terra cotta tile, from George & Borst, 277 South 11th St., (a) $16,699; (b) $16,688; (c) $16,985; W. Linker Co., 831 Cherry St., (a) $17,000; (b) $17,500; (c) $17,400; W. Dougherty, 1608 Sansome St., all of Phila., (a) $17,186; (b) $17,486; (c) $16,986. Noted Nov. 29.

Pa., Phila.—Cranes—Bureau Yards and Docks, Navy Dept., Wash., received bids Dec. 10 installing cranes in galvanizing plant at Navy Yard, (a) 3 cranes complete; (b) two 6-ton, 2 trolley cranes; (c) one 3-ton crane, from Manning, Maxwell & Moore, 119 West 40th St., (b) $31,448; Chesapeake Iron Wks., West Port, Md., (b) $32,800. Noted Nov. 29.

Pa., Phila.—Heating System — Bureau Yards and Docks, Navy Dept., Wash., received bids Dec. 10, installing heating system in foundry at Navy Yard, (work complete), from Mathis Bros. Co., Archer Ave., and Canal St., $49,000; Enterprise Steam & Hot Water Heating Co., 600 North Howard St., Baltimore, Md., $50,972; H. E. Crook Co., Inc., 28 Light St., Baltimore, Md., $56,950. Noted Nov. 15.

Pa., Phila. — Piping System — Bureau Yards and Docks, Navy Dept., Wash., received bids Dec. 10, installing at Navy Yard, (a) work complete; (b) net price with certain exceptions as to material and methods; (c) complete tunnel and laterals, (d) compressed-air, Delaware River water and fresh water distributing systems complete, from General Heating & Ventilating Co., 200 Milwaukee St., Milwaukee, Wis., (a) $159,945, time, 150 days; H. E. Crook & Co., 28 Light St., Baltimore, Md., (a) $213,863; (c) $94,487; (d) $121,471; Henley & Co., 5 North La Salle St., Chicago, (a) $232,000; (c) $119,000; (d) $125,500. Noted Nov. 29.

★Pa., Phila.—Reservoir—Bureau Yards and Docks, Navy Dept., Wash., let contract 2,000,000-gal. rein.-con. reservoir to C. E. Weed, Inc., P. O. Box 7, Albany, N. Y., $45,350. Noted Dec. 6.

★Md., Indian Head—Powder Dry Houses —Bureau Yards and Docks, Navy Dept., Wash., let contract building at Naval Proving Ground to Austin Co., Bulletin Bldg., Phila., Pa., $322,000. Noted Nov. 29.

Wash., D. C.—Excavation—Dist. Comrs. received only bid excavating and backfilling 6000 ft. for 16-in. watermain to be laid on new cut road from 37th St. to about 300 ft. from intersection with Conduit Rd., from W. F. Brenizer, Q N and 1st Sts., $0.40 per lin.ft. for excav. and $0.25 per lin.ft. for backfill.

★Wash., D. C.—Foundry Extension—Bureau Yards and Docks, Navy Dept., let contract building at Navy Yard to Warren, Moore & Co., 12th and Market St., Phila., $83,000. Noted Dec. 6.

★Wash., D. C.—Steel Towers—Bureau Yards and Docks, Navy Dept., let contract building two 200 ft. steel towers at Naval Radio Sta., Virgin Isles, West Indies, to Bedford Fdry. & Machine Co., Bedford, Ind. About $18,190. Noted Dec. 6.

★W. Va., Charleston—Electric Duct System—Bureau Yards and Docks, Navy Dept., Wash., let contract building at U. S. Naval projectile plant, to G. E. Eng. Co., 417 Canal St., New York City. About $8,988. Noted Dec. 6.

★N. C., Chapel Hill—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract, to Haynes Bros., Chatham, Va., $43,950. Noted Dec. 6.

★S. C., Charleston—Power-Plant Improvements—Bureau Yards and Docks, Navy Dept., Wash., let contract to Gillie & Geoghegan, 537 West Bway., New York City, $119,875. Noted Dec. 6.

★Fla., Arcadia—Aviation Stations—War Dept., N. D. Baker, secy., let contract building 2 aviation stations to J. G. White, Inc., 43 Exch. Pl., New York City. About $1,500,000, cost plus percentage. Noted Nov. 29 under "Wash., D. C."

Ala., Decatur—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received bids from S. Plato, Marion, Ind., $47,822; Dreher Constr. Co., 746 Marquette Bldg., Chicago, $51,897; J. N. Boston, Marion, Ky., $54,791. Noted Nov. 1.

★Ala., Montgomery—Aviation Station—War Dept., N. D. Baker, secy., let contract to J. H. Alexandria, 338 West Front St., Memphis, Tenn. About $750,000, cost plus percentage. Noted Nov. 29 under "Wash., D. C."

★Miss., Vicksburg — Levee Work — 3rd Mississippi River Dist., P. O. Box 404. Vicksburg, let contract building Riverton levee to Roach, Stansell, Lawrence Bros. & Co., North Memphis Saving Bank Bldg., Memphis, Tenn., $52,480; Worthington levees, to H. B. Blanks, Vicksburg, $72,500. Noted Nov. 8.

★La., New Orleans—Jetties—U. S. Engrs. Office, Custom House, New Orleans, let contract furnishing and placing 33,000 tons stone on jetties at Southwest Pass, Mississippi River, to L. F. Alexander, Audubon Bldg., New Orleans, $180,486. Noted Nov. 1.

★La., New Orleans—Levee Work—U. S. Engr. Office, 519 Canal St., New Orleans, let contract building 1,822,000 cu.yd. earthwork in lower Tensas, Barataria and Ponchartrain Levee Dists. to Daveron White & Co., Baton Rouge, La., $350,059. Noted Nov. 8.

★La., New Orleans—Radio Buildings—Bureau Yards and Docks, Navy Dept. Wash., let contract building at Naval Sta. to Dreher Constr. Co., 746 Marquette Bldg. Chicago, $15,500. Noted Dec. 6.

★Mich., Detroit—Piers, Etc.—U. S. Engineers Office, Detroit, let contract building timber crib concrete piers and excav. of channel of 4th lock, St. Mary's Falls Canal, Mich., to Great Lakes Dredge & Dock Co., Monroe Bldg., Chicago, $242,050. Noted Oct. 11.

★Ill., Great Lakes—Outside Electrical Work—Bureau Yards and Docks, Navy Dept., Wash., let contract for outside electrical work at Naval Hospital, to W. A. Jackson Co., 37 West Van Buren St., Chicago. About $17,735.

★Ill., Great Lakes—Steel Water Tank—Bureau Yards and Docks, Navy Dept. Wash., let contract installing 100,000-gal. steel water tank to Chicago Bridge & Iron Co., 105th and Thorp Sts., Chicago, $8400.

★Kan., Ft. Riley—Bridge—Constructing Quartermaster let contract building rein.-con. bridge, to Leavenworth Bridge Co. Leavenworth. Noted Sept. 6.

★Wyo., Basin—Post Office—J. A. Wetmore, superv., arch., treas. dept., Wash., let contract to W. D. Lovell, 1415 8th St., S. E., Minneapolis, Minn., $36,500, 9 months. Noted Nov. 29.

★Ark., Lonoke—Aviation Station—War Dept., N. D. Baker, secy., let contract building to Stewart McGee Constr. Co., 18 Kahn Bldg., Little Rock, Ark. About $750,000, cost plus percentage. Noted Nov. 29, under "Wash., D. C."

★Tex., Ft. Sam Houston—Aviation Station—War Dept., N. D. Baker, secy., let contract, to T. Harman, St. Louis, Mo. About $750,000; cost plus percentage. Noted Nov. 29, under "Wash., D. C."

★Tex., Fort Worth—Experimental Station—Bureau Yards and Docks, Navy Dept., Wash., let contract, to Bryce Bldg. Co., 909 Throckmorton St. About $1,000,000; cost plus percentage.

★Cuba, Guantanomo — Foam Fire Protection—Bureau Yards and Docks, Navy Dept., Wash., received bids Dec. 10, (a) work complete; (b) with modifications as desired by bidder; (c) gravity foam protection system for 7 steel fuel-oil tanks complete; (d) pressure foam protection system for 2 concrete fuel-oil storage reservoirs, residue fuel-oil tank and gasoline storage tank, from Carroll Electric Co., 714 12th St., Wash., D. C., (a) $135,750; (b) deduct $2575; (b2) $18,000; (b3) $21,000; (c) $63,800; (d) $78,350; Stewart Eng. Co., 61 Bway., New York City, (a) $130,200; (c) $56,270; (d) $74,980. Noted Nov. 8.

MISCELLANEOUS

Proposed Work

Tunnel—Bridgeport, Conn.—See "Streets and Roads."

Coal Pockets—Jersey City, N. J.—Union Terminal Cold Storage Co., 12th St., had plans prepared by J. G. Glover, archt., 222 Navy St., Brooklyn, N. Y., for 2½-story. 25 x 47-ft. About $25,000.

Retaining Wall — Bellaire, O. — See "Streets and Roads."

Park Improvements, Etc.—Cleveland, O. —Cuyahoga Co. Park Comn., Old Court House, plans to improve parks and boulevards. About $200,000. R. Hyre, secy.

Dock—Superior, Wis.—Great Northern Allonez Co. plans to rebuild ore dock No. 3. About $500,000.

Transmission Lines—Vail, Ia.—City voted $11,000 bonds to build transmission line from here to Denison.

Dam—Bridgeport, Neb.—Bridgeport Irrigation Dist. having plans prepared for concrete and earth dam across Platte River. About $75,000. Address R. H. Williams.

Miscellaneous (Continued)

Waterfront Improvement—Corpus Christi, Tex.—City election Jan. 2 to vote on $600,000 bonds to improve waterfront, including 15,000 ft. shore protection, several million yards filling, 5 mi. paved streets, rein.-con. bridges, etc. R. Miller, mayor.

Pipe Line—Morrison, Okla.—City election Dec. 20, to vote on $10,000 bonds to build pipe line. E. R. Edward, pres. bd.

Wharf—San Francisco, Cal.—State Bd. Harbor Comrs., Sacramento, had plans prepared by F. G. White, ch. engr., building 56 x 2145-ft. wharf at China Basin from point near Channel St. to pier No. 54, including 4 piers and eventually a causeway from wharf to Mission Rock; 60 x 75-ft. shed on pier No. 41; 110 x 710-ft. shed on Pier No. 3; 30 x 400-ft. bulkhead wharf building and 66 x 99-ft. passenger building.

Dredging — Three Rivers, Que. — Tide Water Shipbuilding Co. plans to dredge channel from St. Lawrence River to its plant. About $20,000. H. B. Tourigny, dist. engr.

Subway — London, Ont. — Western Fair Bd. plans to build subway. A. M. Hunt, Dominion Savings Bldg., secy. treas.

Wharf and Ways—Vancouver, B. C.—J. Coughlan & Sons, 500 Beatty St., having plans prepared for wharf and 4 launching ways at False Creek.

BIDS DESIRED

Station Finish—New York, N. Y.—Until Dec. 26, by Pub. Serv. Comn., 120 Bway., for station finish on parts of Bway.-4th Ave. and 7th Ave.-Lexington Ave. Rapid Transit R.R.

BUILDING OPERATIONS FOR NOVEMBER

Following is a list of contracts awarded published by the F. W. Dodge Co. for New England, New York, New Jersey, Pennsylvania, Maryland, Delaware, District of Columbia, Virginia, Ohio, West Virginia, Illinois, Indiana, Iowa, Wisconsin, Michigan, Minnesota, North and South Dakota, and portions of Missouri and eastern Kansas from Jan. 1 to Nov. 1, 1917:

January 1 to December 1, 1917	$1,527,370,000
January 1 to December 1, 1916	1,243,998,397
January 1 to December 1, 1915	857,190,100
January 1 to December 1, 1914	677,920,300
January 1 to December 1, 1913	798,117,500
January 1 to December 1, 1912	803,391,500
January 1 to December 1, 1911	735,283,813
January 1 to December 1, 1910	756,284,931

NEW YORK AND NORTHERN NEW JERSEY

Comparative statistics of building and engineering operations in New York State and Northern New Jersey, as compiled by the F. W. Dodge Company:

January 1 to December 1, 1917	$316,014,000
January 1 to December 1, 1916	255,381,500
January 1 to December 1, 1915	155,154,500
January 1 to December 1, 1914	121,598,000
January 1 to December 1, 1913	235,694,500
January 1 to December 1, 1912	211,282,500
January 1 to December 1, 1911	215,839,500
January 1 to December 1, 1910	233,081,000

The November total for contracts awarded in the larger territory amounts to $94,278,000 against $154,451,574 for October, and $122,464,271 for September. For the smaller territory the figures for November are $29,738,000 against $38,921,000 for October, and $35,027,000 for September.

Fast Erection of Munition Plant — The day after a contract for millions of dollars' worth of special recoil mechanisms had been let to Dodge Brothers, Detroit, by the United States Government, work began on a plant in that city for manufacturing the mechanisms. Excavation for the 578 x 818-ft. building is going forward rapidly, at the present time, and it is expected that the plant will be in operation by spring. The construction is in charge of Dodge Brothers' superintendents.

Federal-Ship Plant Built in 76 Days—The large ship-erecting plant of the Submarine Boat Corporation has been virtually completely erected, on Newark Bay, N. J., in 76 days. Keels of three steel ships will be laid before Jan. 1, 1918. The plant should be releasing completed vessels by June. More than 50 are expected to be turned out in 1918. The plant has contracted for 150, aggregating 750,000 tons.

Flooring — Willard, N. Y. — (Official)— Until Dec. 19, by State Hospital Comn. Capitol, Albany, for new floor construction at Willard State Hospital. E. S. Elwood. secy.; advertised in this issue.

Bulkhead—Atlantic City, N. J. — See "Streets and Roads."

Fire Escapes—Dover, N. J.—(Official)— Until Dec. 18, by Bd. Educ., North Side School, for fire escapes and other alterations to South Side School. C. H. Benedict, secy.; advertised in this issue.

Levee Work—Shreveport, La.—(Official) Until Dec. 28, by Comrs. Caddo Levee Dist., Shreveport, building in Caddo Parish, Red River, right bank, above Shreveport. Briarfield to Cottonwood Bayou Levee, involving 102,000 cu.yd. excav.; Cottonwood Bayou to Hurricane Bluff Levee, involving 106,000 cu.yd. excav.; Hurricane Bluff to Cairo Levee, involving 105,000 cu.yd. excav.; Cairo to Fire Point Levee, involving 97,000 cu.yd. excav.; Fire Point to Pickett Levee, involving 116,000 cu.yd. excav.; below Shreveport, Caldwell Point to Tones Bayou Levee, involving 120,000 cu.yd. excav. W. A. Kerley, secy. Noted Oct. 18.

River Channel Improvements—Columbus, O.—Until Dec. 18, by G. A. Borden, dir pub. serv., widening Scioto River, also building levees, bridge, etc. Noted Nov. 22; advertised in this issue.

Creek Diversion—Rosedale, Kan.—(Official)—Until Dec. 22, by A. H. Schmedinghoff, city clk., for constructing Turkey Creek Diversion, upper section involves excav. of channel for distance of about 3500 ft. building levees for channel, rein.-con. bridge over channel on Southwest Blvd., steel bridge on Rosedale Ave. and removal and rebuilding of foot bridge on Henning Ave.; lower section, excav. channel, about 6100 ft., levees, concrete tunnel 28 ft. in diam. and about 1300 ft. long, and subway under certain Santa Fe tracks, all to provide for channel flow of Turkey Creek, Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., cons. engrs.

Levee — Chamois, Mo.—(Official)—Until Jan. 5, by J. R. Garstang, secy., bd. comrs., Shawnee Creek D. D., building 60,000 cu.yd. earth levee; advertised in this issue.

Seawall, etc.—Long Beach, Cal.—Until Dec. 18, by Bd. Pub. Wks., building combined rein.-con. seawall, sidewalk, center wall, end walls, steps, vitr. pipe culverts, sheradized wrought iron conduits, concrete lighting posts, etc., on Seaside Blvd. About $76,000. Noted Nov. 15.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Tunnel—Pittsburgh, Pa.—Alleghany Co. Comrs. let contract for tunnel connecting county court house and city-county building, to F. F. Schellenberg, Hartje Bldg. About $29,238.

Flood Control Works—Dayton, O.—Bd. Dir., Miami Conservancy Dist. rejected all bids building dams and appurtenances for flood control work. Work will be performed under direct supervision of district. Noted Nov. 22.

★Revetment Work—Sioux City, Ia.—Sioux City Stockyards Co. let contract for piling willow facing and riprap work, to E. A. Whitney, 621 5th St., $20,000.

★Embankment — Dallas, Tex. — See "Streets and Roads."

BARGE CANAL WORK

Contract 165

Bids were received by W. W. Wotherspoon, supt. pub. wks., for removing Montezuma Aqueduct and completing canal prism excavation, also redredging canal prism, near Fox Ridge, from (A) Engineer's estimate; (B) Mohawk Dredge & Dock Co., Inc., Herkimer. The unit bids were as follows:

	A	B
170,700 cu.yd. excavation	$0.40	$0.79
5,630 cu.yd. removing old masonry	1.25	3.25
925 M. ft. b. m. removing old timber	3.00	12.00
2,830 pulling round piles	1.25	2.50
345 lin.ft. pulling wooden sheet piling sta., 5,440	2.00	4.00
2,600 lin.ft. furnishing and driving fender piles	50	.80
2,600 lin.ft. driving fender piles	35	.55
Extended totals	$84,530	$176,216

STATE HIGHWAYS—CALIFORNIA

Bids were received by State Highway Comn., Sacramento, for constructing highway in Los Angeles Co., Div. 7, Route 9, Sect. "A," from (a) A. L. McCray, 234 West 28th St., Los Angeles; (B) F. Hoffman, 111 East 12th St., Long Beach; (C) G. R. Curtis, 2440 East 26th St., Los Angeles. The unit bids were as follows:

	A	B	C
258,000 cu.yd. excavation without classification	$0.71½	$0.76	$0.85
3,250 lin.ft. 12-in. corrugated metal pipe	60	.70	1.50
3,980 lin.ft. 18-in. corrugated metal pipe	70	1.00	1.50
1,450 lin.ft. 24-in. corrugated metal pipe	80	1.50	1.50
398 lin.ft. 30-in. corrugated metal pipe	90	2.25	1.50
1,803 cu.yd. portland cement concrete, class "A" (cul's. and mon's.)	15.00	16.00	17.50
203 cu.yd. portland cement concrete, class "C" (retaining walls)	14.00	16.00	17.50
8.5 mi. moving and resetting property fences	225.00	300.00	250.00
1,032 monuments (haul and set)	1.00	1.25	1.75
Extended totals	$223,556	$241,342	$271,953

Bids were received by State Highway Comn., Sacramento, for constructing highway in Humboldt Co., Div. 1, Route 1, Sect. "B," from (A) Palmer & McBryde, Hooker & Lent Bldg., San Francisco; (B) A. J. Fairbanks, Willits; (C) Warren A. Bechtel, 625 Market St., San Francisco; (D) Bates & Borland, Oakland Bank Savings Bldg., Oakland, $283,818; (E) Shattock Eddinger Co., San Francisco, $338,621. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
53,700 cu.yd. excavation without classification	$0.75	$1.00	$0.90
858 lin.ft. 18-in. corrugated metal pipe	2.00	1.00	1.00
365 lin.ft. 24-in. corrugated metal pipe	2.00	1.50	1.50
310 cu.yd. portland cement concrete class "A" (cul's. and mon's.)	16.00	15.00	15.00
9,800 cu.yd. portland cement concrete, class "A" (pavement)	6.00	5.50	8.60
4,600 lin.ft. guard rail	1.00	.75	.50
170 monuments (haul and set)	1.00	1.00	1.00
Extended totals	$111,251	$117,276	$141,135

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until Dec. 29, 1917.

Bridge Repairs

BOARDS OF SUPERVISORS, ALBANY COUNTY AND RENSSELAER COUNTY, STATE OF NEW YORK

Troy, N. Y.

Sealed bids or proposals for repairing 12th Street Bridge over the Hudson River between Ontario Street, City of Cohoes and 12th Street, Lansingburg, City of Troy, in accordance with form of contract, plans and specifications adopted October 18th, 1917, will be received at the office of C. A. Roemer, County Superintendent, County Court House, Troy, N. Y., until twelve o'clock noon, Saturday, December 29th, 1917, and then and there will be publicly opened and read.

The work consists of repairing trusses and floor beams, renewing all woodwork of floor, building new retaining wall on south side of Cohoes approach and paving bridge and approach with wood block paving.

List of the approximate quantities of material involved is given below:

Structural steel (excluding spikes), 48,000 lbs.

Rivets to knock out, 700.

Holes to drill, 10,100.

Rivets to drive, 9,850.

Creosoted Yellow Pine Scantling, 86,000 ft. B.M.

Creosoted T & G Plank, 62,000 ft. B.M.

Creosoted 2-in., 29,000 ft. B.M.

Old Lumber, off, 175,000 ft. B.M.

3-in. Creosoted wood block paving, 1,720 sq.yds.

3½-in. Creosoted wood block paving, 1,540 sq.yds.

Concrete curb, 673 lin.ft.

7-in. concrete base, 322 cu.yds.

Catch Basins, 2.

Concrete sidewalk paving, 3,540 sq.ft.

Concrete Retaining Wall and Pedestals, 470 cu.yds.

Reinforced Rods and Dowels, 2,000 lbs.

Pipe Railing, 565 lin.ft.

Bids should be addressed to Highway Committee of Rensselaer County and Roads and Bridges Committee of Albany County, Rensselaer County Court House, Troy, N. Y., and endorsed "Bid for repairing 12th Street Bridge."

Bids must state prices for all items of the work and bids which do not include all the prices called for in the bidding form may be rejected.

Plans and specifications may be seen and bidding forms obtained at the office of E. J. Bedell, County Superintendent, Court House, Albany, N. Y., or C. A. Roemer, County Superintendent Court House, Troy, N. Y.

All proposals must be made upon the form furnished by the County Superintendents and must give prices in both words and figures and be signed by the bidder, with his business address and place of residence.

Each bidder will be required to give the Committee satisfactory evidence of his competency, experience and responsibility to perform such work.

Each bid must be accompanied by a certified check or draft for Two Thousand Five Hundred Dollars ($2,500.00) payable to the Treasurers of Albany and Rensselaer Counties, N. Y., such check to be returned to the bidder unless forfeited under the conditions herein stipulated.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue mailed the next day.

PROPOSALS

A bond will be required for the faithful performance of the contract in the sum of 50% of the contract price, with a surety company, authorized to do business, in the State of New York and satisfactory to the Committees.

The person or firm to which contract shall be awarded will be required to offer his surety and to execute contract and furnish required bond within ten days (excluding Sundays) from the date of mailing notice to him, at the address given in his bid, that contract is ready for signature; and in case of failure or neglect to so appear and execute contract and bond, the bidder will be deemed to have abandoned the contract, and the check accompanying the same shall be forfeited to the Counties of Albany and Rensselaer.

The right is reserved to increase or diminish the quantity of work called for, or to omit or modify particular items, as may be deemed necessary.

The right is reserved to reject any and all bids and to waive any defect or informality at the discretion of the committee, should the same be deemed to the best interest of the Counties of Albany and Rensselaer.

WILLIAM B. SHERMAN
A. C. NILES
C. Z. BENNETT
SALEM H. WHITE
JOHN H. FINNERTY
Highway Committee of Rensselaer County, Board of Supervisors.

JOHN J. THOMSON
ALEXANDER FLANSBURG
FREDERICK J. VAN WORMER,
EMANUEL WENGER
MICHAEL S. POE
Roads and Bridges Committee of Albany County, Board of Supervisors.

Bids received until Dec. 20, 1917.

Wingdale Prison Improvements

Wingdale, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work for Cell House, Interlocking Building, Mess Hall, and Central Heating and Lighting Plant, and Underground Piping and Conduit Work, Underground Sewer and Water Connections and Underground Electric Service Connections, at Wingdale Prison, Wingdale, N. Y., will be received by the Commission on New Prisons, Room 618, Hall of Records Building, Centre and Chambers Sts., New York City, until 2:30 o'clock p.m., on Thursday, January 10, 1918, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 2812, 2813, 2814, 2815, 2879, 2882, 2869, 2885, 2872, 2880, 2883, 2870, 2886, 2873, 2881, 2884, 2871, 2887 and 2874. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of the Commissioner on New Prisons, Room 618, Hall of Records, New York City, at the New York office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon the deposit of a certified check in the sum of $10.00 made payable to the State of New York for each set of plans and specifications, which check will be returned if plans and specifications are sent back in good condition to the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: December 10, 1917.

PROPOSALS

Bids received until Dec. 18, 1917.

River Channel Improvement

Columbus, Ohio.

Bids will be received by the City of Columbus, Ohio, at the office of its Director of Public Service, City Hall Building, Columbus, Ohio, until twelve o'clock noon, central standard time, Tuesday, December 18, 1917, for widening the Scioto river and constructing levees, bridges, and other work in connection therewith, in accordance with the plans and specifications on file with Henry Maetzel, Chief Engineer, from whom bidding blanks and information may be obtained.

The work involves the following principal quantities:

1,860,000	cubic yards excavation,
34,000	cubic yards concrete,
72,200	square yards revetment,
33,500	linear feet piling.

Bids will be received on the work:

First: As a whole.
Second: Channel excavation.
Third: All concrete masonry.
Fourth: Seven-span concrete arch bridge, sixty feet wide and six hundred and seventy feet between abutments.
Fifth: Masonry weir, walls and miscellaneous work.
Sixth: Steel bridge, alternative plan for Fourth Item.

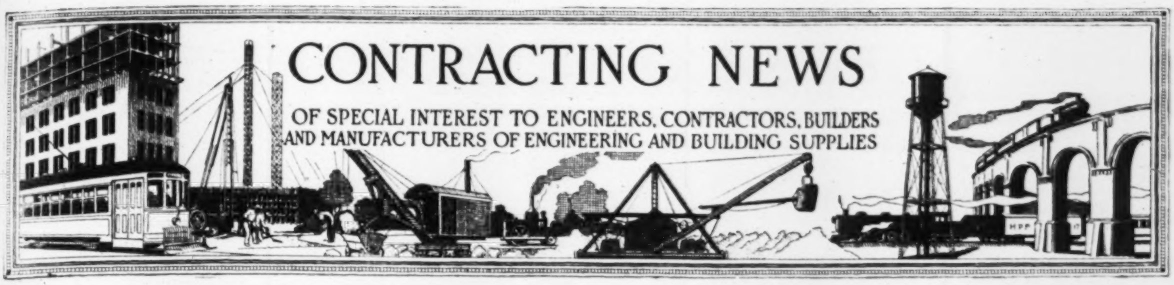
A deposit of $25.00 is required to insure return of plans on or before day of letting.

GEO. A. BORDEN,
Director of Public Service.

Attest:
H. J. KLINE, Secretary.

U. S. ENGINEER OFFICE, 305 Southern Building, Washington, D. C.—Sealed proposals for removing wreck of Barge "Tangier" from York River, Virginia, will be received at this office until 12 M., Dec. 21, 1917, and then opened. Information on application.

UNITED STATES ENGINEER OFFICE, Galveston, Texas.—Sealed proposals will be received here until 12 o'clock M. December 14, 1917, and then opened, for furnishing and delivering riprap at Port Aransas, or Rockport, Texas. Information on application.



CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Proposals

For Proposals Advertised See Pages 47 to 50 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Dec. 27.	Eureka, Kan.	Dec. 20
Dec. 29.	Chanute, Kan.	Dec. 20
Jan. 3.	Tipton, Kan.	Dec. 20

SEWERS

Dec. 24.	West Park, O.	Dec. 13
Dec. 24.	Enid, Okla.	Dec. 20
Dec. 27.	Normal, Ill.	Dec. 20
Dec. 27.	Elizabeth, N. J.	Dec. 20
Dec. 27.	Pittsburgh, Pa.	Dec. 20
Dec. 27.	New York, N. Y.	Dec. 20
Dec. 30.	Rocky River, Ohio	Nov. 29
Jan. 3.	Union Grove, Wis.	Dec. 20
Jan. 7.	Westfield, N. J.	Dec. 20
Jan. 8.	Miami, Okla.	Dec. 20
Feb. 1.	Toledo, O.	Dec. 13

BRIDGES

Dec. 29.	Troy, N. Y. Adv. Dec. 13 and 20.	Dec. 13
Jan. 3.	Anoka, Minn.	Dec. 20
Jan. 4.	Richmond, Va.	Dec. 20
Jan. 8.	Salinas, Cal.	Dec. 13
Jan. 9.	Lodge Grass, Mont.	Dec. 20

STREETS AND ROADS

Dec. 24.	California	Dec. 13
Dec. 24.	Long Island City, N. Y.	Dec. 20
Dec. 26.	Newark, N. J.	Dec. 20
Dec. 26.	Riverside, Cal.	Dec. 20
Dec. 27.	Ft. Collins, Colo.	Dec. 20
Dec. 27.	Elizabeth, N. J.	Nov. 29
Dec. 27.	Ohio	Dec. 13
Dec. 27.	Atlantic City, N. J.	Dec. 13
Dec. 27.	New York, N. Y.	Dec. 20
Dec. 28.	Webster Springs, W. Va.	Dec. 13
Dec. 29.	Huntington, Ind.	Dec. 6
Dec. 31.	Bay Minette, Ala.	Dec. 6
Dec. 31.	California	Dec. 20
Jan. 2.	Alexandria, La.	Dec. 13
Jan. 4.	Richmond, Va.	Dec. 20
Jan. 7.	Pasco, Wash.	Dec. 20
Jan. 8.	Wenatchee, Wash.	Dec. 20
Jan. 8.	Oregon	Dec. 20

EXCAVATION AND DREDGING

Dec. 27.	Mason City, Ia.	Dec. 20
Dec. 31.	Glenwood, Minn.	Dec. 20
Jan. 3.	Sac City, Ia.	Dec. 20
Jan. 9.	Tuscola, Ill.	Dec. 20
Jan. 11.	Walker, Minn.	Dec. 20

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Jan. 8.	Albany, N. Y. Adv. Dec. 20.	Dec. 20

BUILDINGS

Dec. 24.	Cleveland, Ohio	Dec. 6
Dec. 24.	Syracuse, N. Y.	Dec. 13
Dec. 24.	Lima, O.	Dec. 20
Dec. 26.	Taft, Cal.	Dec. 20
Dec. 27.	New York, N. Y.	Dec. 20
Dec. 27.	Phila., Pa. Adv. Dec. 20.	Dec. 20
Dec. 27.	Greycourt, N. Y.	Dec. 20
Dec. 30.	St. Cyprien, Que.	Dec. 13
Dec. 31.	Brooklyn, N. Y.	Dec. 20
Jan. 1.	Wichita, Kan.	Nov. 22
Jan. 7.	Cleveland, O.	Dec. 20
Jan. 8.	Dodge Center, Minn.	Dec. 13
Jan. 15.	New York, N. Y.	Nov. 29
Jan. 16.	Huron, S. D.	Dec. 20

FEDERAL GOVERNMENT WORK

Dec. 24.	Fuel Oil System — San Diego, Cal.	Dec. 13
Dec. 26.	Sewerage System, Water Supply Intake, Reservoir —Washington, D. C.	Dec. 6
Dec. 27.	Post Office — Alexandria, La. Adv. Nov. 22 and 29.	Nov. 22
Dec. 27.	Steam Heating System—Shawnee, Okla.	Dec. 6
Jan. 4.	Buildings — Grande Isle, La. Adv. Dec. 6 and 13.	Dec. 6
Jan. 5.	Jetty Work — Jacksonville, Fla. Adv. Dec. 13.	Dec. 13
Jan. 7.	Post Office — Eldorado, Kan.	Dec. 6
Jan. 7.	Post Office — Shawnee, Okla.	Dec. 6
Jan. 7.	Electric Traveling Cranes——Brooklyn, Y.	Dec. 13
Jan. 7.	Post Office — Bakersfield, Cal.	Dec. 20
Jan. 7.	Laundry Equipment, etc.—Annapolis, Md.	Dec. 20
Jan. 14.	Post Office—Owego, N. Y. Adv. Dec. 13 and 20.	Dec. 13
Jan. 14.	Roads—Chelsea, Mass.	Dec. 20
Jan. 15.	Post Office — Eldorado, Kan.	Dec. 20
Jan. 21.	Radio Towers and Tanks—Barataria, La.	Dec. 20
Jan. 28.	Post Office—Sunbury, Pa.	Dec. 6

MISCELLANEOUS

Dec. 26.	Station Finish—New York, N. Y.	Dec. 13
Dec. 27.	Dam—Eureka, Kan.	Dec. 20
Dec. 28.	Levee Work — Shreveport, La.	Dec. 13
Jan. 2.	Improving Harbor — Newport, Ore. Adv. Nov. 29 to Dec. 13.	Nov. 29
Jan. 3.	Transmission Line — Fremont, N. C.	Dec. 20
Jan. 5.	Levee—Chamois, Mo Adv. Dec. 13 and 20.	Dec. 13
Jan. 15.	Dam—Calgary, Alta. Adv. Dec. 20.	Dec. 20

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

Conn., Torrington — City having plans prepared by C. H. Preston, Jr., engr., 136 Grand Ave., Waterbury, building 3 reservoirs near here. About $1,300,000.

N. J., Millville—City election soon to vote on $125,000 bonds to purchase and improve People's Water Co. W. B. Wade, city engr.

Pa., Butler—Butler Water Co. will issue $321,500 stocks; proceeds to provide for extensions and improvements. H. O. Carson, engr.

Pa., Columbia—Columbia Water Co. acquired land adjoining plant and plans to build addition to filtration plant.

Pa., Connellsville — Connellsville Water Co. will issue $27,000 stocks; proceeds to be used for extensions and improvements.

Pa., McKeesport—(Official) — Boro. receives bids in spring for new water system, including 4 one million-gal. filters, pumping plant, boiler house, standpipe and pipe lines. About $500,000. L. Hudson, 8021 House Bldg., Pitttsburgh, engr. Noted Nov. 29.

Pa., Phila.—City plans to lay water pipe in Stenton Ave., from Ogontz Ave. to Broad St.; Sharpnack St. from Stenton to Michener Aves.; Cheltenham Ave. from Ogontz Ave. to Vernon Rd.; Phil-Ellena St. and Vernon Rd. from Stenton to Cheltenham Aves.; Michener and Pickering Aves. and Thouron St., from Vernon Rd. to Limekiln Pike; Woolston Ave. from Walnut to Washington Lanes; 71st Ave. and Tulpehocken St. from Woolston Ave. to Limekiln Pike. C. E. Davis, city engr.

Pa., Warren—Warren Water Co. will issue $14,500 stocks; proceeds to be used for improvements and extensions.

W. Va., Wheeling—City authorized G. O. Nagle, supt. water-works, to purchase 3 chlorine gas machines to be attached to reservoir intake pipes.

Ala., Talladega — City issued $35,000 bonds to build water system. J. W. Vindiver, mayor.

Ky., Paducah—City retained F. W. Ballard & Co., engrs., 811 Swetland Bldg., to make surveys and prepare plans for waterworks system.

O., Cleveland—(Official)—City plans to issue $50,000 bonds for water-works system. R. Hoffman, city engr.

O., Hamilton — City plans additions to water-works. About $18,000. F. E. Weaver city engr.

O., Rocky River — (Official)—City will sell $26.159 bonds, Jan. 15, to lay and install water mains in West Lake Rd. F. Mitchell, clk.

O., West Park—(Official)—Lander Eng. Co., Amer. Trust Bldg., Cleveland, receiving bids for 3562 ft. 6-in., and 96 ft. 4-in. cast iron pipe and 4 hydrants in connection with water main improvements. About $10.-500. Noted Nov. 1.

Ill., Charleston — City plans to rebuild water system, involving 2,000,000 gal. pump, new boiler, 1 low and high lift pump, etc. About $13,155. J. A. Tremble, city engr.

Wis., Merrill—City Council plans to purchase water-works equipment.

Water-Works (Continued)

Kan., Galena—City receives bids about Feb. 1, improving water-works and filtration plant. About $100,000 Burns & McDonnell, 402 Interstate Bldg., Kansas City, Mo., engrs. Noted Oct. 18.

Neb., Falls City—City election Jan. 15, to vote on $15,000 bonds to extend water system.

Neb., Omaha—City plans to lay 4 mi. water mains to Ft. Crook. About $60,000. J. A. Bruce, city engr.

N. D., Minot—City soon receives bids for water mains and 3,000,000-gal. rein.-con. reservoir. F. Bass, 244 Plymouth Bldg., Minneapolis, engr. Noted Sept. 27.

Mont., Winnett—City plans to build reservoir. About $15,000.

Okla., Altus—City voted on $80,000 bonds for water-works system. Noted Nov. 22.

Idaho, Montour—R. E. Noland plans to build pumping system to water 2200 acres of land south of here. About $30,000.

Idaho, Twin Falls—City plans to build water system. Bond election soon.

Ariz., Verde — (Liberty P. O.) — See "Buildings."

Ariz., Yuma—(Official) — City will not vote Dec. 11 on $400,000 bond issue to build water, gas, electric-light, heat, and power systems. Noted Nov. 29.

Que., Montreal—City receives bids about April or May building water system, dykes, etc. About $40,000. P. Mercier, engr.

Que., St. Georges de Champlain — City having plans prepared by W. Bourassa, engr., Grand' Mere, for acqueduct. About $50,000.

Ont., Bienville—City is in market for hydraulic pump with 250,000-gal. capacity.

Ont., Peterboro—City plans to build water mains. About $13,000. R. H. Parson, engr.

BIDS DESIRED

Kan., Chanute—(Official)—Until Dec. 29, by C. G. Woods, city clk., improving water system. Black & Veatch, Inter-State Bldg., Kansas City, Mo., engrs. Noted Nov. 29.

Kan., Eureka—Until Dec. 27, by J. W. Kenner, city clk., improving water-works system involving 360 cu.yd. concrete, plain and reinforced, and 1500 cu.yd. embankment. Black & Veatch, Interstate Bldg., Kansas City, Mo., engrs. Noted Oct. 18.

Kan., Tipton—Until Jan. 3, by N. Arnoldy, city clk., furnishing and installing equipment for water-works system, Sect. 1, 2, 3, 4, and 5 involves 10,287 ft. 4-6 in. cast iron pipe, 13 hydrants, 10 valves, 100-ft. tower, 30,000 and 50,000-gal. tank, one 100-gal. triplex pump clutch connected to 12 hp. gasoline engine, etc. G. P. Taylor, Stockton, engr. Noted May 31.

Okla., Miami—See "Sewers."

Cal., Taft—See "Buildings."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York — W. Williams, comr. water supply, gas and electricity, received bids laying water mains and appurtenances in 5th Ave. and Delancey St., from Beaver Eng. & Contg. Co., 51 Chambers St., $44,429; J. A. Gregory, 286 West 137th St., $78,478; Knight & DeMicco, Inc., 2353 Washington Ave., $85,583. Noted Dec. 6.

★Ark., Marvel—See "Sewers."

Wash., Seattle—Bd. Pub. Wks. received bids building water mains in Alki Ave. (a) wood pipe; (b) cast iron pipe, from Superior Constr. Co., 131 Nob Hill Ave., (a) $58,993; (b) $99,899; Scalzo & Co., 1708 22nd Ave., (a) $61,551; (b) $103,311. Noted Sept. 20.

SEWERS

Proposed Work

N. J., Lyndhurst—City will issue $200,000 bonds to build sewerage system.

N. J., Millburn—Town Com. passed ordinance to build storm sewer in Model Park and extend sewers in Cypress and Wyoming Sts.

N. J., Morristown — City plans to build addition to sewage disposal plant by adding 6 additional acres. Address W. H. Dutton.

N. J., Paterson—City plans to build sewer in Shady St. from Lowe St. to 6th Ave., and in 23rd Ave. from East 33rd to East 35th Sts. H. J. Harder, city engr.

N. J., Phillipsburg—City had plans prepared by C. G. Wigley, engr., State Bd. of Health, Trenton, for new sewage disposal plant.

N. J., Ridgewood — Township plans to build storm sewer in Roland Ave., between Ridgewood Rd. and Millburn Ave. M. R. Silance, clk.

Pa., Carbondale—City having plans prepared by State Bd. Health, Harrisburg, building outfall sewer and sewage treatment works.

Pa., College Hill—(Beaver Falls P. O.)—Boro. had plans prepared building sanitary sewerage system. Bonds for $36,000 voted for project. H. Dawson, boro. engr.

Pa., Leetsdale—City having plans prepared by State Health Dept., Harrisburg for sanitary sewage extension for collection and treatment of sewage.

Pa., Penns Station — City having plans prepared by T. P. Herron, engr., Irwin, for sewage system involving 8000 lin.ft. sanitary terra cotta pipe. About $25,000.

Pa., Phila.—City plans to rebuild sewers in King St., Wissahicken Ave., and Queen Lane and build sewers in Washington Lane from Ogontz to Stenton Ave.; Wyncote and 67th Ave., from Limekiln Pile to Ogontz Ave.; 18th St. from Shelten to Meadary Aves. C. E. Davis, city engr.

Pa., Pottstown—City having plans prepared by E. C. Collins, engr., 511 Drexel Bldg., Phila., to extend sewer to low level, 5 or 6 mi. About $100,000. J. K. Klink, chn.

Pa., Rutledge—City plans to build 4 mi. sewers. About $25,000.

Pa., Wesleyville—City having plans prepared by B. E. Briggs, engr., building sanitary sewerage system and sewage disposal plant.

Pa., West Middlessex—Borough having plans prepared by L. D. Tracy, engr., 245 4th Ave., Pittsburgh, for sewerage system and sewage disposal plant. F. H. Bair, Colonial Trust Co., Farrell, secy.

Pa., Williamsport — City Council passed resolution to build sewerage system at Sawyer Park to form new industrial district.

Pa., Wilson—Boro having plans prepared by State Health Dept., Harrisburg, building sanitary sewerage system and sewage disposal plant for northern portion of boro.

Ala., Anniston—(Official)—City soon lets contract building sanitary sewers in western section of city. C. W. Cooper, city engr.

O., Cincinnati—(Official)—Council passed ordinance to build sewers in Dover St. from Morgan to Wayne Sts.; Wayne St. from Dover St. to Cincinnati, Lebanon & Northern R.R.; Liston Ave. from Tyler to Maag Sts.; Colfax Ave. and right of way from Liston Ave. to Ohio River; Queen City Ave. from White St., 20 ft. westwardly and White St. from Queen City Ave. to Wickham Alley. F. Krug, city engr.

O., Cleveland — (Official) — City plans building sewers in East 124th, 125th, 126th, 127th, and 128th Sts., from Buckeye Rd. to Williams Ave. east, $13,144; Corlett Ave., S. E. from East Blvd. to East 131st St. and East 116th St., from Corlett Ave. to Farrington Ave., $50,000. R. Hoffman, city engr.

O., Niles — City having plans prepared building sewage disposal plant. About $16,000. H. Turner, city engr.

O., West Park — Lander Eng. Co., 306 Amer. Trust Bldg., Cleveland, receiving bids for 1200 ft. 15-in., 2256 ft. 12-in. and 1075 ft. 18-in. vitr. pipe and 196 ft. 12-in. rein.-con. pipe, concrete catch basin and combination manholes.

Ill., Quincy—City plans to build sanitary sewers in 6th St. from Washington to Monroe Sts.; Madison St. from 6th to 8th Sts.; Monroe St. from 6th to 10th Sts.; 10th St. from Spruce to Chestnut Sts.; 11th St. from Spruce to Chestnut Sts.; Vermont St. from 18th to 24th Sts. About 3 mi. E. R. Chatten, city engr.

Ia., Clarksville—City soon received bids for sewer system. G. H. Bishop, Independence, engr.

Kan., Belleville—City had plans prepared by Black & Veatch, engrs., 507 Inter-State Bldg., Kansas City, Mo., for sewerage system.

Mont., Poplar — City having plans prepared for sewerage system.

Tex., Farmersville—City plans to build sewerage system. W. Jones, secy.

Okla., Lindsay—City plans to build sewerage system.

Utah, Ogden—City plans to build sewers in Dist. 138, involving 17,500 ft. pipe. About $28,000. M. J. Tracy, city engr.

Ariz., Verde — (Liberty P. O.) — See "Buildings."

Cal., Los Angeles — City soon receives bids building vitr. pipe sewer in 11th, Vine, 10th, 7th, 6th and 4th Sts., Poinsetta Ave and other streets and alleys, involving 51,000 lin.ft. 8-14 in. vitr. pipe, manholes, catch basins, etc. A. C. Hansen, city engr.

Cal., Santa Barbara—City had plans prepared for Reinsch-Wurl screen sewage treatment plant. Olmstead & Gillelen, 1112 Hollingsworth Bldg., Los Angeles engrs.

N. S., Picton—City plans to build sewers in Water, Church, and Front Sts. About $60,000.

Ont., Goderich—Town plans to build sewers on Victoria St. and Britannia Rd. About $50,000. L. L. Know, clk.

Ont., Renfrew—Town plans to build 8-in. sewer on Barr St. from Hill to Combs St. About $40,000. J. H. Stewart, engr.

BIDS DESIRED

N. Y., New York—(Official)—Until Dec. 27, by M. M. Marks, boro. pres., Municipal Bldg., building receiving basin southeast corner Madison Ave. and 42nd St.; southeast corner 38th St. and 7th Ave.; rebuilding sewer in 63rd from 3rd to Park Aves.; sanitary sewers with pumping station and appurtenances in Thompson St. from Canal St. to point 350 ft. north of Broome St.

N. J., Elizabeth—Until Dec. 27, by Bd. Pub. Wks., installing two 75-hp. horizontal electric motors, complete wiring, conduits, insulators, connectors, etc., for sewage pumping station. T. E. Collins, ch. engr.

N. J., Westfield—Until Jan. 7, by City, building about 1950 lin.ft. 8-in. sanitary sewers and appurtenances in Seneca Pl., Grandview and Columbus Aves., and Pine St. A. W. Vois, city engr.

Pa., Pittsburgh—(Official) — Until Dec. 27, by City building 15-in. sewers in Floral Sts., Klein Ave., and Edwin St., from point near Loeffler St. to Oakdale St.; Bethe Pl. from North Highland to Sheraden Aves.; Haverhill St. and Nimick Pl. from Inglerook Pl. and McKee St. to Warsaw St.; Pinerue Ave. from Marlow St. to Lorenz Ave.; Rosina Way from Taylor to Ella Sts.; Southside Ave. from Entrance Ave. to Luella and Bessie Sts.; Glenn Way from May Way to Enfield St. N. S. Sprague, city engr.

Ill., Normal — Until Dec. 27, by City, building west side sewer.

Wis., Union Grove—(Official)—Until Jan. 3, by C. Moe, village clk., installing 3976 ft. 8-12-in. vitr. pipe, 10 manholes, 1 flush tank and sewage disposal tank.

Mont., Terry—Until Dec. 26, by Town, building sewerage system. D. C. Bradley, clk.

Okla., Enid — Until Dec. 24, by O. L. Green, city clk., building sanitary sewer in block 22 and Jonesboro addition.

Okla., Miami—(Official)—Until Jan. 8, by N. F. Wright, building sewage and water systems. About $32,000. Hughes Eng. Co., 310 Bank Commerce Bldg., Tulsa., engrs. Noted Oct. 25.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—M. M. Marks, boro. pres., received low bids Dec. 6 for repairs to outlet sewer in East 42nd St., from East River to 3rd Ave., (a) prop A, (b) prop B, from Reilly Contg. Co., Inc., 172 East 94th St., (a) $25,812, (b) $56,164; Laconia Contg. Co., 835 East 213th St., (a) $29,440, (b) $52,917; Gasperini & De Blasio, (a) $40,460, (b) $70,320. Noted Dec. 6.

★N. J., Manasquan—Boro. let contract building additions to sewerage system to Sincerbeaux & Moore, 1st Natl. Bank Bldg., Princeton, $10,000. Noted Nov. 22.

★Pa., Oil City—City let contract building 12,900 ft. 6-24 in. sewers in 10th Ward to Lesher & Loess, Oil City, $20,413.

★O., Cleveland—(Official)—City let contract building sewers in Corlett Ave., S. E. from East Blvd. to East 131st St., involving 2160 ft., 6 in. and 900 ft., 5-in. pipe, to Gawne Contr. Co., $46,000. Noted Nov. 15.

Sewers **(Continued)**

★O., Columbus—(Official)—City let contract building Markison Ave. extension sewer to W. D. Sullivan, $2452; sewer in alley north of 17th Ave. and alley east of Cleveland to Cleveland, Akron & Cincinati R.R. sewer, to J. F. Ryerson, $8586. Noted Dec. 6.

★Ark., Marvel—City let contract installing water-works and sewage plants to U. S. Sanitary Septic Tank Co., Exchange Bldg., Memphis, $43,000. Noted May 24.

Wash., Seattle—Bd. Pub. Wks. received bids installing sewer in 25th Ave., N.E., (a) clay pipe; (b) concrete pipe, from V. Ramaglia, 4830 37th Ave., N. E., (a) $59,260; (b) $59,074; Superior Constr. Co., 131 Nob Hill Ave., (a) $60,187; (b) $60,197

★Ont., St. Catherines—City let contract building relief and outlet sewer to McLaughlin Bros., $70,000. Noted Nov. 8.

BRIDGES

Proposed Work

Pa., Carbondale—(Official)—City having plans prepared by Peck Bros., engrs., Scranton Life Bldg., Scranton, for steel viaduct over tracks of Delaware & Hudson R.R. at intersection of Lundaff and Fallbrook Sts.

Pa., Harrisburg—Dauphin Co. plans to build bridges over Paxton Creek at Sycamore and Shaonix Sts., and over Manada Creek at Sand Beach.

Pa., Norristown—See "Miscellaneous."

La., Shreveport—(Official)—City and Bd Comrs., Caddo Lake Dist., having plans prepared by Waddell & Son, engrs., 934 Wyandotte St., Kansas City, Mo., for bridge over Cross Bayou, foot of Market St. Noted Sept. 27.

O., Girard—City soon receives bids for 1000-ft. traffic bridge over Erie and Pennsylvania R.R. at Liberty St. W. R. Deemer, village clk.

O., Hamilton—See "Industrial Works."

Ia., Manchester — Delaware Co. receives bids in January for bridge with two 70-ft. arches, 40-ft. roadway and 6-ft. sidewalk. H. Klaus, co. engr.

Minn., Crookston—Great Northern Ry. having plans prepared for 6th St. viaduct, concrete pier. About $10,000. A. H. Hogeland, 1222 R.R. Bldg., St. Paul, ch. engr.

Kan., Ft. Scott—Bourbon Co. plans to build 3 bridges. R. W. Tiles, engr., c/o M. J. Rose, clk., receives bids about Feb. 1.

Mont., Noxon—City voted $50,000 bonds to build bridge.

BIDS DESIRED

Va., Richmond—Until Jan. 4 by City, building Ginter Park viaduct, Chamberlayne Ave., rein.-con., including grading streets and building approaches. About $123,000. C. E. Bolling, city engr.

Minn., Anoka — Until Jan. 3, by City, building rein.-con. bridge over Rum River, Pleasant St. L. P. Wolff, St. Paul, engr.

Minn., Walker — See "Excavation and Dredging."

Mont., Lodge Grass — Until Jan. 9, by State Highway Comn., Helena, building 100 ft. span combination bridge over Little Big Horn River.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., New York—D. Mathewson, boro. pres. (Bronx Boro.), received low bids building bridges and approaches, regulating, re-regulating paving and repaving Gun Hill Rd. between Webster and White Plains Aves., from O. Daniels Co., Woolworth Bldg., $234,983; Spadiro Contg. Co., 827 East 217th St., $241,018; P. T. Cox Contg. Co., 154 Nassau St., $241,734. Noted Nov. 22.

★Pa., Harrisburg—(Official)—State Pub. Grounds and Building Dept. let contract for 180-ft. steel truss bridge with solid floor and stone abutments, to Stebbins Constr. Co., Wellsboro., $45,000. Noted Dec. 6.

★Pa., Nelson—(Official)—G. A. Shreiner, supt. pub. Grounds and Bldgs., Capitol Bldg., Harrisburg, let contract building bridge at Nelson, Tioga Co., to M. W. Stebbins Constr. Co., Wellsboro, $45,000. Noted Nov. 29.

★W. Va., Fairmont — (Official) — Bd. Affairs let contract building rein.-con. bridge over Monongahela River, to J. F. Casey Co., Union Arcade, Pittsburgh, Pa., cost plus 9% commission. Limited to $40,000. Noted Dec. 6.

★Ariz., Tombstone—Cochise Co. let contract building rein.-con. bridge over San Pedro River, 2 Luten arches, 70 ft. each, to Topeka Bridge & Iron Co., Kansas City, Mo., $26,250.

STRUCTURAL STEEL WORK

Proposed Work

Pa., Carbondale—See "Bridges."

REINFORCED CONCRETE

Proposed Work

O., Cleveland—See "Miscellaneous."

Tex., San Antonio—See "Buildings."

BIDS DESIRED

Va., Richmond—See "Bridges."

Minn., Anoka—See "Bridges."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★N. Y., Brooklyn—See "Industrial Works."

★W. Va., Fairmont — (Official) — See "Bridges."

★Ariz., Tombstone—See "Bridges."

STREETS AND ROADS

Proposed Work

R. I., Warwick—(Official) — Town receives bids in February building following roads: Pawtuxet Ave., to Elmwood Ave., Norwood; Gate Rd. from Apponaug to West Warwick Line; Warwick Neck Rd. from station south of Carpenter Corners to Budlong Corner, Warwick. J. H. Potter, aud. Noted Dec. 6.

N. J., New Brunswick—Bd. Freeholders, Middlesex Co. plans to pave Highland Park-Bound Brook Rd. About $300,000.

N. J., Salem—(Official)—Bd. Freeholders Salem Co., receives bids in February for road work, Pennsgrove Twp. About $75,000. Noted Dec. 6.

Pennsylvania—(Official)—State Highway Dept., Harrisburg, received no bids building roads in Mill Creek and Harbor Creek Twps., Erie Co., also for improving road in Clearfield Boro. Noted Nov. 29.

Pa., Eddystone—Boro sold $35,000 bonds to pave streets.

Pa., Harrisburg—City plans to improve 3rd St. About $16,000. M. B. Cowden, city engr.

Pa., Hollidaysburg—Blair Co. plans road from Williamsburg through Clover Creek alley, via Beaverton and Shelleytown, to Fredericksburg and Martinsburg.

Delaware—State Highway Dept., Dover, preparing plans for 3 concrete roads in Sussex Co. Noted May 24.

W. Va., Moundsville—Marshall Co. soon receives bids repaving and improving road through Narrows between McMechen and Glendale. S. H. Bonar, co. engr.

N. C., Edenton—Town will issue $128,000 bonds to pave portions Main, Water, King and other streets.

N. C., Louisburg — Franklin Co., Sandy Creek Twp., sold $50,000 bonds to improve roads.

N. C., Marshall—Madison Co. voted $100,000 bonds to improve roads, Precinct No. 1.

N. C., Monroe—City plans to issue $164,000 bonds to improve streets.

N. C., Rutherfordton — Rutherford Co. election Jan. 19, to vote on $11,850 bonds to build roads in Cool Springs, Rutherfordton, Green Hill and Chimney Rock Twps. G. F. Watson, chm. co. rd. comrs.

Fla., De Land—Volusia Co. plans election to vote on $200,000 bonds to build road from De Land to Putnam Co. line, involving sand-asphalt road with shell base, curb, clay or shell shoulders, 3 ft. wide, making maximum width of 15 ft. State will appropriate $64,000 toward cost.

Fla., West Palm Beach—Associated Realty Investors, 1269 Bway., plan several miles rock road, sidewalks, etc., in connection with resident development.

Ala., Scottsboro—Jackson Co. received no bids macadamizing part State Trunk Rd. No. 4, between Woodville and Limrock, involving 9000 cu.yd. crushed stone. Noted Nov. 15.

Ala., Troy—City having plans prepared paving north and south Three Notch, College, Walnut and portions Montgomery and Murphree Sts.

Ala., Tuscumbia — Colbert Co. rejected bids improving 7.02 mi. Jackson Highway, including 16,132 cu.yd. earth excav.; 9650 cu.yd. gravel; 2850 cu.yd. chert; 11,215 sq.yd. bituminous treatment; 44 cu.yd. concrete; 84 lin.ft. D. S. vitr. pipe. Noted Nov. 8.

Miss., Carrollton—Carroll Co. issue $50,000 bonds to improve roads.

La., Kenner—City plans to issue $15,000 bonds to improve streets. P. Felix, mayor.

Ky., Louisville — Jefferson Co. plans to build Poplar Level Rd. from city to Camp Zachary Taylor. About $12,000 for asphalt pavement. R. Gaines, co. engr., advises heavier reconstruction at three times cost. Federal Government to appropriate towards cost.

O., Cincinnati—(Official)—Council passed ordinance to issue $114,500 bonds to improve Evanston Ave. from Fairfax to Hewitt Aves., Pike St., Vickham Alley, Vinyard Pl. and other streets. F. Krug, city engr.

O., Coshocton—Coshocton Co. plans to build roads. Federal Government and State will appropriate $37,000 toward cost.

O., Ironton — (Official) — City plans to pave streets. About $100,000. L. G. Howell, city engr. Noted July 5.

O., Newark—City soon lets contract repaving Church St., sheet asphalt and asphalt concrete. About $54,000. C. H. Wells, city engr.

O., Portsmouth—Scioto Co. plans to improve Main Market Rd.; also build 1 mi. of Ohio River Rd., and 1 mi. Portsmouth Lucasville Rd., brick, macadam, and brick. About $40,000 state aid has been asked.

Ind., Elkhart — City soon lets contract paving Michigan and Franklin Sts. and Lexington Ave. L. Russell, city engr.

Mich., St. Johns — Clinton Co. plans to build 6¼ mi. road between Ovid and Elsie.

Ill., Chicago—Chicago Plan Comn. submitted plans to council for transforming South Water and River Sts., between Michigan Ave. and Market St., into double-decked boulevard. About $5,282,680. J. Ericson, city engr.

Ill., Minonk—City plans to pave Lincoln St., from 4th to 7th Sts.; Walnut St. from 4th to 5th Sts.; 7th St. from Walnut to Maple Sts.; 8th St. from Chestnut St. to Maple Ave.; Oak St. from 7th to 8th Sts.; Locust St. from 7th to 8th Sts.; Oak St. from 3rd to 4th Sts.; 3rd St. from Oak St. to Maple Ave.

Ill., Quincy—City plans to pave 3rd St. from Vine to Vermont Sts.; Oak St. from 2nd to 5th Sts.; Bway. from Front to 5th Sts.; Jersey St. from 5th to 9th Sts. E. R. Chatten, city engr.

Wisconsin—(Official) — State Highway Comn., Madison, receiving bids in March, grading 6 mi. road and building 15 ft. crushed gravel macadam on above grading, Lincoln Co. About $30,000.

Ia., Iowa City—(Official) — Johnson Co. receives bids about Apr. 1, building 1 mi. hard surfaced highway from here to Coralville; also grading about 10 mi. (earthwork) to permanent grade. Federal Government will appropriate toward cost. A. F. Fusher, co. engr. Noted Dec. 6.

Ia., Rock Rapids—Lyon Co. plans to improve roads, including Sibley-Sioux Falls Rd. About $46,000. E. H. Riegel, aud.

Minn., Red Wing—Goodhue Co. plans to improve Burlington Highway. About $300,000. C. H. Myer, aud.

South Dakota—(Official)—State Highway Dept., Pierre, plans to appropriate $235,234 to build roads in various counties as follows: Minnehaha Co., asphalt macadam, $39,400; Codington Co., $38,832; Deuel Co., $28,943; Grant Co., $34,130; Moody Co., $30,200; Brookings Co., $20,000; Lincoln Co., $41,728; all to be hard surfaced with local gravel. F. S. Peck, highway engr.

Mo., Columbia—Boone Co. voted $80,000 bonds to build Old Trails Rd. from Columbia to Minola Hills.

Tex., Belton—Bell Co. voted bonds to build and maintain roads. Noted Nov. 1.

Tex., Canton — Van Zandt Co. election soon to vote on $900,000 bonds to build roads.

Streets and Roads (Continued)

Tex., Dallas—Dallas Co. plans to improve roads. About $40,000.

Tex., Orange—Orange Co. election soon to vote on $600,000 bonds to build roads.

Tex., Sinton—San Patricio Co. election soon to vote on $250,000 bonds to build roads.

Colo., Pueblo—Pueblo Co. plans to build highways. About $90,800.

Ariz., Tombstone—Cochise Co. voted $1,000,000 bonds to build county highway system. Noted Nov. 1.

Wash., Vancouver — Clarke Co. having plans prepared for finishing embankment on River Rd. west of city and extending 11th St. About $11,000. B. L. Dorman, co. engr.

Oregon—State Highway Dept., Salem, had surveys made for realignment and grading Oregon Trail from Pendleton to Baker, and from La Grande to Elgin. H. Nunn, state highway engr.

Ore., Astoria—Clatsop Co., Astoria Rd. Dist., voted $22,000 bonds to improve road around Smith's Point, connecting with Taylor Ave.

Ore., Enterprise—Wallowa Co. plans to build roads. About $100,000.

Ore., La Grande—Union Co. plans post road from La Grande to Elgin. State will appropriate $32,000 toward cost.

Ore., McMinnville—Yamhill Co. plans to improve 7 mi. of Tillamook Rd., through Grand Ronde Reservation. Cost, $40,000. Federal Government and State will appropriate $30,000 towards cost.

Ore., Pendelton—Umatila Co. plans to grade road from Pendelton to Gulgard.

Ore., Roseburg—Douglas Co. plans to build 11¼ mi. road from Canyonville to Johns Ranch and 2 mi. road from Canyonville West to connect with road from Riddle. Federal Government and State will appropriate toward cost. B. Nichols, co. comr.

Cal., Riverside—Riverside Co. had plans prepared by R. W. Waterman, co. engr., building following roads in Rd. Impvt. Dist. No. 2: grading and graveling 15,300 lin.ft. on Lovekin Blvd., extending north to Blythe; 19,856 lin.ft. on Hobsonway east from Blythe; 10,000 lin.ft. on Fertilla Rd., extending west from Blythe, grading 5264 additional ft.; grading 5200 lin.ft. Canes Rd., extending from south from Blythe; grading 2618 lin.ft. on Anelo Valley Rd., extending south from Blythe; graveled roadways will vary from 10-20 ft. in width and .4-.8 in. thickness; also building rein.-con. siphons, culverts, headgates, bridges, turnouts, and crossings; improving 1-mi. road at Wineville, on Stiwanda Ave., between Winneville Sta. and Stearns Winery, concrete on macadam base; road will connect Foothill and Valley Blvd.; also about 700 ft. county highway across Temescal Wash east Coronan and graveling road between Banning and Hot Springs, 6 in. deep and 14 ft. wide between Cabazon and Whitewater.

Cal., San Diego—(Officials) — City received no bids grading Upas St., between Granada Ave. and line 120 ft. west, and Abbott St. from Long Beach to Brighton Aves. Noted Nov. 29.

Cal., Santa Barbara—Santa Barbara Co. election Dec. 29, to vote on $40,000 bonds for highway work in Mission Rd. Dist.

Cal., Stockton—San Joachim Co. having plans prepared improving 7 mi. Clementslone Rd. F. E. Quail, co. engr.

Que., Maisonneuve—City plans to pave Girard St. About $20,000. J. Hinton, secy.

BIDS DESIRED

N. Y., Long Island City—(Official)—Until Dec. 24, by M. E. Connolly, pres. Queens Boro., regulating, curbing, laying sidewalks on Jamaica Ave. from Van Wyck to Cliffside Aves.

N. Y., New York—(Official)—Until Dec. 27, by D. Mathewson, pres. Bronx Boro., regulating, grading, and regrading, setting and resetting curb, laying and relaying sidewalks, building inlets, receiving basins, drains, culverts and approaches in University Ave. from Featherbed Lane to West 174th St.; West 174th St. from University to Montgomery Aves.; paving with sheet asphalt on concrete foundation and granite blocks on sand foundation, 3rd Ave. from East 188th St., to Fordham Rd.; Park Ave. east from East 188th St. to Fordham Rd.; East 189th St., from Washington to Webster Aves.; Fordham Rd. from Park to Webster Aves.

N. J., Newark—(Official)—Until Dec. 26, by Bd. Freeholders, Essex Co., improving Sanford Ave. from Irvington-Newark line to Newark-East Orange line. H. W. Heilmann, co. engr.

Va., Richmond—See "Bridges."

Ia., Stuart—(Official)—Until Jan. 15, by city, paving, curbing and guttering 11 blocks. About $45,000. T. S. DeLay, Creston, city engr. Noted Dec. 6.

Minn., Walker — See "Excavation and Dredging."

Colo., Ft. Collins—(Official)—Until Dec. 27, by City, for 13,156 sq.yd. rein.-con. pavement, etc.; advertised in this issue.

Wash., Pasco—Until Jan. 7, by Franklin Co. building 8 mi. highway near Pasco.

Wash., Wenatchee—Until Jan. 8, by Chelan Co., building Rd. No. 287, known as Johnson Creek or Muddy Creek Rd.

Oregon—Until Jan. 8, by State Highway Comn., Yeon Bldg., Portland, building 5.8 mi. Columbia River Highway from Hood River to Mosier involving 195,000 cu.yd. excav. H. Nunn, state highway engr. Noted Nov. 1.

California—Until Dec. 31, by State Highway Comn., 515 Forum Bldg., Sacramento, building concrete pavement on Ridge Road. Angeles Co., between Kay Ranch and Quail Lake. About 26 mi. A. B. Fletcher, engr.

Cal., Riverside—Until Dec. 26, by A. B. Pilch, clk., Riverside Co., building 2 mi. concrete pavement on Etiwande Ave., north from Wineville; improving highway between Cabazon and Whitewater and building concrete pavement on 6th St. extension: Corona.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Brooklyn—L. H. Pounds, Brooklyn boro. pres. received low bids Dec. 12, regulating, and paving roadway of 86th St. from 21st to 22nd Ave., asphalt on 6-in. concrete foundation, from Borough Asphalt Co., 1301 Metropolitan Ave., $10,729; Uvalde Asphalt Paving Co., 1 Bway., New York City, $10,383; Cranford Co., 52 9th St., $10,398. Noted Dec. 6.

N. Y., New York—D. Mathewson, pres. Bronx Boro., received low bids, Dec. 12, regulating, grading, setting curb, laying sidewalks, building inlets and reapproaches and guard rails, etc., in West 176th St., from Jerome Ave., to Macomes Rd., from Gasperini & Delbalso, 1964 Honeywell Ave., $15,412; J. T. Cabalozo, $15,798; T. Menna, $16,355. Noted Dec. 6.

N. Y., New York—See "Bridges."

N. Y., New York—M. M. Marks, boro. pres. received low bids Dec. 12, regulating and repaving roadway of 10th St., from Stuyvesant St., to University Pl., sheet asphalt on concrete foundation, from Davenney Asphalt Co., 52 Vanderbilt Ave., $24,054; Asphalt Constr. Co., 2197 Madison Ave., $24,406; roadway of 3rd Ave., from 6th to 8th Sts., wood block on concrete foundation, from W. J. Fitzgerald, 547 West 45th St., $16,099; roadway of 3rd Ave., from 6th to 8th Sts. (water, tar, gas specifications), wood block on concrete foundation, from W. J. Fitzgerald, 547 West 45th St., $15,164; Franklin Contg. Co., 52 Vanderbilt Ave., $15,466. Noted Dec. 6.

Pennsylvania—(Official)—State Highway Comn., Harrisburg, received low bids building 4700 ft. vitr. block pavement, 16-18 ft. wide, in Lawrence Twp., Clearfield Co., from Clearfield Boro. line to point on Penfield Rd. at Flegal Rd., from J. Boyce, Clarence, $42,614; D. W. Anderson, Clearfield, $44,137; C. E. Chase, Clearfield, $47,671. Noted Nov. 29.

★S. C., Spartanburg — State Highway Dept., Columbia, let contract surfacing concrete road to Camp Wadsworth, to Morrison & Glover, Augusta, $37,000.

★Fla., De Land—Volusia Co., Halifax Special Rd. Dist., let contract building 15 mi. rock with asphalt binder road to Akerman & Ellis, Titusville.

★Fla., Perry—City let contract improving streets, asphalt on macadam base, to Edwards Constr. Co., Judy Dock, Tampa, $75,000. Noted Nov. 8.

★Ala., Bessemer—City let contract paving 6 blocks on 19th St., vitr. brick, to Sullivan, Long & Hagerty.

★O., Canton—Stark Co. let contract building Minerva-Robertsville Rd. to F. A. Downs, Constr. Co., Lawrence Rd. and Gibbs Ave., $48,782; Brewster Massillon Rd., to E. Vogt, Massillon, $21,784; Navarre Richville Rd. to H. Cork, Canton, $45,033.

Ind., Anderson—Madison Co. received low bids paving Meridian Ave., from Indiana Asphalt & Paving Co., 25th St. and Lake Erie & Western Ry., Indianapolis; Brooks Constr. Co., 2104 Miner St., Ft. Wayne; Premier Constr. Co., 1023 Lemcke Bldg., Indianapolis. Noted Nov. 29.

★Minnesota—(Official) — State Highway Comn., 300 Shubert Bldg., St. Paul, let contract grading Minnesota Federal Aid Project No. 3, Mille Lacs Co., to C. A. Pogue Co., $69,272. Noted Oct. 25.

★Minn., Red Wing—(Official)—Goodhue Co. let contract building Minnesota Federal Aid Project No. 11, involving 3 acres clearing, 3.6 acres grading, 55,887 yd. side ditching, 5775 cu.yd. guard rail, etc., to Foley, Young & Peabody, 48 Merchants' Natl. Bank Bldg., St. Paul, $20,499. Noted Nov. 15.

Neb., Columbus—City received bids Dec. 4, paving various streets, from W. Horrabin, 1422 Walnut St., Iowa City, Ia., $2.35 for bitulithic; Natl. Roofing Co., 11th and Clark St., $2.14; sheet asphalt, $1.92; asphaltic concrete; E. D. Tyner Constr. Co., Kansas City, Mo., $2.18; sheet asphalt, $1.87; asphaltic concrete, $2.46; brick and $2.52, vertical fibre brick. Noted Nov. 15.

★Neb., Holdrege—City let contract improving streets in Dist. No. 1, involving 39,100 sq.yd. pavement, 4442 ft. curb, 10,053 lin.ft. curb and gutter, to Roberts Constr. Co., 510 1st Natl. Bank Bldg., Lincoln, $2.54 per sq.yd. Noted Nov. 29.

★Mo., Kansas City—City let contract building artificial stone sidewalks on 59th St., to Missouri Stone Wks. Constr. Co., Room B, Mass Bldg., 15.96c. per sq.ft. Noted Oct. 18.

★Mo., Stanberry—(Official) — City let contract paving, curbing and guttering Main St., to E. Main, Liberty, $20,000. Noted Nov. 22.

★Washington — State Highway Comn., Olympia, let contract building 10 mi. Sunset Highway between Vantage Ferry and Burke to Quigg Constr. Co., Wanatchee, $68,690; grading and draining 30.6 mi. Central Washington Highway between Pasco and Connell to A. L. Mitchell and C. M. Payne, 724 East Mission St., Spokane $52,984. Noted Nov. 22.

★Oregon—(Official) — State Highway Comn. Yeon Bldg., Portland, let contract grading 1½ mi. in Wheeler Co., on Ochoco Forest Rd., 4 mi., from Mitchell, to United Contg. Co., Northwestern Bank Bldg., Portland, $25,070.

★Cal., Sacramento — Sacramento Co. let contract building 13 mi. concrete highway on top of levee along bank of Sacramento River near Grand Island to Tibbitts-Pacific Co., 16 California St., $137,878. Noted Dec. 6.

Cal., San Diego—City received only bid paving, building cement curbs, and walks on National Ave., 13th and 16th Sts., involving 77,706 sq.ft. asphalt on concrete base, from Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $14,614. Noted July 26.

★Cal., San Francisco—City let contract to Fay Impvt. Co., Phelan Bldg., improving following streets: 19th St., between Tennessee and Minnesota Sts., granite curbs, $1.48 per ft.; asphalt pavement on concrete base, $0.27 per sq.ft.; Mississippi St. between 19th and 20th Sts., brick pavement, $0.419 per sq.ft.; asphalt pavement on concrete base, $0.234 per sq.ft.; resetting granite curbs, $0.24 per ft., new granite curbs, $1.18 per ft.

Cal., San Francisco — State Bd. Harbor Comrs., Sacramento, received bids paving east side of Embarcadero between piers 7 and 17, from O. McHugh, Russ Bldg., $14,974; G. W. McGinn, Phelan Bldg., $17,862; Fay Impvt. Co., $17,887. Noted Nov. 20.

★Cal., Santa Ana—Orange Co. let contract paving 2.8 mi. of Santa Ana Canyon Rd., Sect. 3, to J. S. Miller, $13,915. Noted Nov. 22.

★Cal., Stockton — San Joachim Co. let contract building highway near Tracy, to C. Moreing & Sons, Stockton. About $13,260.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

New Jersey—Atlantic City Steamship & Terminal Co., New Jersey & Clam Creek Sts., plans to build 350-ft. marine railway at head of New Jersey Ave., Atlantic City. F. J. McDonald, Phila., pres.

Railways (Continued)

West Virginia — (Official)—Charleston-Dunbar Traction Co. plans to build 9 mi. line including power house and car barns. E. W. Alexander, genl. mgr., soon receives bids.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Florida**—Tampa Southern R.R. let contract building 50-mi. line as follows: From Tampa to Little Manatee River, to B. Morrison; Little River to Palmetto, to W. E. Parker, 402 Curry Bldg., Tampa.

EXCAVATION AND DREDGING

Proposed Work

N. Y., New York—(Official)—Excavation—F. J. Kracke, comr. plant and structures, Municipal Bldg., rejected bids received Dec. 6, excavating and dredging at site of Eastchester Bridge. New bids. Noted Dec. 13.

Wis., Milwaukee—Drainage—Milwaukee Co. soon lets contract for drainage system and open ditching, involving 4000 ft. open ditch and 1½ mi. 15-in. tile. Kamschulte & Webster, 421 M. & M. Bank Bldg., engrs.

Minn., St. James — (Official) — Ditch — Watonwan Co. received no bids building Judicial Ditch No. 18 involving 62,986 ft. 6-34-in. tile; Judicial Ditch No. 13, involving 73,765 ft. 6-34-in. tile. J. C. Jensen, co. aud. Noted Nov. 22.

Mo., Winfield — Drainage — City having plans prepared by T. N. Jacob, engr., Cahokia Bldg., East St. Louis, Ill., building drainage system near here. About $40,000.

Wash., North Yakima—Drainage—R. K. Tiffany, head of Yakima Rec. Wk., will apply to Rec. Serv., Wash., D. C., to appropriate $1,000,000 for new work. Plans include construction of Tienton Dam, which will be highest earth dam in the world.

Ore., Klamath Falls—Irrigation—Klamath Indian Reservation plans to enlarge Modoc Point Irrigation project and install several small units. H. W. Hincks, engr. Total cost of work, $35,000, of which $17,000 is now available.

BIDS DESIRED

Ill., Tuscola—Drainage—Until Jan. 9, by Comrs. D. D. No. 5, Douglas Co., building drainage system, involving 17,378 cu.yd. open ditch, 1927 ft. 18-27-in. tile, 27-in. salt-glazed vitr. sewer pipe and bulkhead containing 12⅓ cu.yd. concrete.

Ia., Mason City—Drainage—Until Dec. 27, by G. E. Frost, aud., Cerro Gordo Co., building D. D. No. 40, as follows:

Main line, Sect. 2, involves 16,500 ft. of 6-38-in. tile and 12 laterals involving 19,400 ft. of 6-15-in. tile.

Sect. 5, Hammond lateral, road laterals and 22 branch laterals involving 54,300 ft. of 6-22 in. tile and 3 inlets.

Sect. 6, 22 laterals involving 55,050 ft. of 6-36-in. tile.

Sect. 7, 16 laterals, involving 43,700 ft. of 6-30-in. tile and 7 inlets.

Sect. 8, 6 laterals involving 15,600 ft. of 6-22-in. tile.

Sect. 9, 10 laterals involving 27,450 ft. of 5-28-in. tile, and 5 inlets.

Sect. 10, 12 laterals involving 23,400 ft. of 6-22-in. tile and 4 inlets.

Ia., Sac City—Drainage—Until Jan. 3, by E. W. Moyer, aud., Sac. Co., improving D. D. No. 65, involving 19,660 ft. 8-30-in. tile, 1 bulkhead and spillway, about 11 cu.yd.

Minn., Glenwood — (Official) — Ditch — Until Dec. 31, by O. Irgens, aud., Pope Co., excav. Co. Ditch No. 15, involving about 129,705 cu.yd. Noted Dec. 6.

Minn., Walker—Ditch—Until Jan. 11, by C. D. Bacon, aud., Cass Co., building Judicial Ditch No. 7 in Cass and Wadena Cos., involving 455,858 cu.yd. excav., 12 highway bridges, 1 rein.-con. culvert, clearing 100.34 acres, and building 7.41 mi. highways. About $53,438.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Pa., Beaver**—Excavation—Beaver Co. let contract 14,000 cu.yd. excav. in Moon and Center twps. to M. Baker. About $17,400.

★**Kan., Salina** — Drainage — Bd. Superv. D. D. No. 1, Salina Co., let contract building drainage system involving 87,250 cu.yd. excav., to P. C. Buskirk, Hutchinson. Noted Dec. 13.

★**Mo., Clayton** — Excavation — St. Louis Co. let contract 42,000 cu yd. excav., to Cameron Joyce Co., Keokuk, Ia. About $18,060.

INDUSTRIAL WORKS

Proposed Work

Mass., Brockton — Sterling Motor Co., Center St., plans 2-story, 24 x 250-ft. and 24 x 280-ft. addition to plant.

Mass., Chelsea—Partner Rubber Co., 170 Summer St., Boston, had plans prepared by S. S. Eisenberg, archt., 30 Exchange Bldg., for 2-story, 50 x 135-ft. and 3-story, 50 x 60-ft. warehouse and shoddy mill. About $36,000.

N. Y., Brooklyn—Continental Varnish Co. Inc., 317 New Jersey Railroad Ave., Newark, N. J., having plans prepared by L. A. Abramson, archt., 220 5th Ave., New York City, for group factory of buildings here, including 1-story, 20 x 25-ft., 1-story, 30 x 80-ft., 1-story, 20 x 20-ft., 1-story, 20 x 25-ft., 1-story, 30 x 64 ft. About $25,000.

N. Y., Brooklyn—H. Rubin, 317 Bedford Ave., having plans prepared by H. A. Weinstein, archt., 165 Remsen St., for 1-story, 100 x 114-ft. brick garage, Snediker Ave. About $30,000.

N. Y., Brooklyn—B. Stein, 756 Flushing Ave., had plans prepared by Millman & Son, archts., 1780 Pitkin Ave., for 1-story, 50 x 100-ft. garage. About $25,000.

N. Y., New York—Duval Co., Pier 39, North River, had plans prepared by G. M. McCabe, archt., 96 5th Ave., for 4-story, 361 x 371-ft. garage, 361-371 West 12th St. About $100,000.

N. Y., New York — Sussman Holding Corp., 448 East 167th St., having plans prepared by C. Schaefer, Jr., archt., 529 Courtlandt St., for 2-story, 98 x 108-ft. garage (Bronx Boro.). About $30,000. B. Sussman, pres.

N. J., Bloomfield — Power Specialty Co., 111 Bway., New York City, plans new factory on Locust Ave., here. About $31,000.

N. J., Jersey City—Union Terminal Cold Storage Co., Provost and 12th Sts., plans addition. About $85,000.

N. J., Newark—American Can Co., 310 Elizabeth Ave., plans to build 2½-story, 100 x 240-ft. and 40 x 100-ft. brick and rein.-con. factory and office. About $286,200.

N. J., Trenton — Trenton & Mercer Co. Traction Co., 137 East State St., plans to rebuild car barns recently destroyed by fire with a loss of about $65,000. R. Johnson, pres.

Pa., Phila. — Esterbrook Pen Co., Delaware and Cooper Sts., plans to alter factory and also build new 4-story addition.

Pa., Pittsburgh — Great Atlantic & Pacific Tea Co. had plans prepared by Ballinger & Perrot, archts., 17th and Arch Sts., Phila., for 3-story brick and rein.-con. warehouse, East Liberty St.

Del., Wilmington — Penn-Seaboard Steel Corp. plans to build addition to plant on Delaware River near here. Plans include a power house. About $2,300,000.

Md., Baltimore—U. S. Industrial Chemical Co., recently incorporated with $24,000,000 capital stock, has acquired site on Curtis Bay and plans to build factory. A. J. Carr, Baltimore, interested.

Md., Highlandtown—A. Weiskittle & Son Co., Lombard St., plans to rebuild 3 units of its plant recently destroyed by fire. About $50,000.

Va., Richmond—Montague Mfg. Co., 10th and Main Sts., plans 3-story, 90 x 145-ft. storage building. E. Rigland, pres.

Va., Roanoke—City election Feb. 12, to vote on $175,000 bonds to build 80 x 170-ft. market and assembly hall.

W. Va., Dunbar — Traction Co. plans to rebuild its barns and electric power plant, recently destroyed by fire. About $75,000.

W. Va., Wheeling—Beech Bottom Power Corp., incorporate with $400,000 capital stock, plans to buld electric plant.

West Virginia—See "Railways."

Fla., Fernandina—Fernandina Shipbuilding & Dry Dock Co., 510 Libert Bldg., Phila., purchased 30-acre site and plans to build plant here. J. A. Ryan, gen. supt.

Ala., Mobile — Chickasaw Shipbuildin Co. plans plants here. About $11,000,000. G. G. Crawford, pres.

Ky., Paducah—J. M. Buckner, 903 West Main St., Louisville, will build 5 large tobacco warehouses. Cost, between $75,000 and $100,000. Address W. R. and G. Katterjohn.

O., Akron—International Harvester Co., East Center St., plans warehouse. About $50,000.

O., Cleveland—Motor Service Co., recently incorporated, plans 2-story garage and service plant. About $150,000.

O., Hamilton — Hamilton Furnace Co., Hamilton, plans to build boiler plant, dumper and ore bridge. About $500,000. J. Kennedy, Bessemer Bldg., Pittsburgh, archt.

O., Warren—International Steel Tube & Rolling Mills, 433 Guardian Bldg., Cleveland, recently incorporated with $2,500,000 capital stock, purchased 50-acre site on Baltimore & Ohio R.R. here and plans to build 50-ton tube mill. O. R. Grimmesey, pres.

Ind., Gary—Universal Portland Cement Co., Indiana Harbor, increased capital stock from $1,000,000 to $3,500,000 and plans additions and improvements.

Ind., Indianapolis—J W. P. Tire Co. has increased its capital stock from $300,000 to $1,000,000 and plans addition.

Ill., Cairo—Menominee Electric Mfg. Co., Menominee, Mich., has been reorganized with $600,000 capital stock, and plans to build factory here.

Ill., Chicago—Chicago Shipbuilding Co., 101st St. and Calumet Ave., had plans prepared by S. N. Crowen, archt., 30 North La Salle St., for 1- and 2-story, 100 x 120-ft. warehouse and office building. About $75,000. K. Fairbanks, pres.

Ill., Chicago — Chicago Surface Lines, North Clark St., having plans prepared for 4 car barns, 450 ft. long; also 1-story power house, and 2-story office building. About $500,000. H. B. Fleming, 105 South La Salle St., ch. engr.

Ill., Chicago—McCord & Co., 847 West 120th St., plans 1-story foundry. About $30,000.

Ill., Chicago—G. P. Nichols & Bros., 37 West Van Buren St., soon lets contract for factory. F. H. Coney, 116 West Illinois St., archt.

Ill., Chicago—Pullman Couch Co., 3759 South Ashland Ave., purchased site and plans factory. Cost between $300,000 and $500,000. J. Kramer and J. L. Scandig, owners.

Ill., Chicago — C. Quinland, 124 South Green St., plans to build 4-story factory. About $30,000.

Ill., Chicago—See "Buildings."

Ill., Moline—Deere Co., 1325 3rd St., having plans prepared by A. Echimh, archt., c/o Deere Co., for factory. About $1,000,000. F. Wharton, secy.

Ill., Joliet—Chicago & Joliet Electric Ry. plans to build substations at Osgood and St. Louis Sts., and Delwood Park. About $50,000. E. J. Andrews, Joliet, ch. engr.

Wis., De Pere—Western Steel & Mfg. Co. plans to build addition to plant and power house. About $25,000.

Wis., Gidden—Northern Wood Products Co. plans addition to power plant. About $40,000.

Wis., Madison—Southern Wisconsin Foundry Co., Pennsylvania Ave., plans to rebuild foundry recently destroyed by fire. About $50,000.

Wis., West Allis — Allis-Chalmers Co. plans addition to forge shops. About $1,000,000.

Minn., Minneapolis—Federal Steel & Mfg. Co., 1117 Metropolitan Life Bldg., soon lets contract, 1-story, 100 x 400-ft. machine shop, and 1-story, 100 x 125-ft. foundry. F. D. McClure, pres.

Minn., Minneapolis—Gas Traction Foundry Co., 2907 4th St., S.E., plans 1-story, 98 x 285-ft. brick and concrete foundry. About $75,000.

Industrial Works (Continued)

Kan., Independence — Western States Portland Cement Co. plans to improve and enlarge plant. About $250,000.

Neb., Falls City — City voted $75,000 bonds to build electric power plant.

Mo., St. Louis—Bullis Mfg. Co., 1122 South 12th St., had plans prepared for 1-story, 380 x 153 x 240-ft. factory, Calvary Ave. About $100,000. W. Levy, archt., 1815 Wright Bldg., soon lets contract. Noted Nov. 8.

Tex., Beaumont — Crystal Ice Co., 805 Pearlsteam Bldg., soon lets contract for 45 x 60-ft. ice plant. About $25,000. S. A. Spencer, mgr. M. R. Carpenter, 62 Pickering Bldg., Cincinnati, archt.

Tex., Cleburne—Texas Motor Car Assn. plans factory here. About $1,000,000. W. Ginnuth, Temple, vice pres.

Tex., Dallas—Atlas Cabinet Co. plans factory. About $30,000.

Tex., Galveston—Texas Flour Mills, 202 8th Ave., has increased its capital stock from $500,000 to $1,500,000 and plans additions.

Okla., Ardmore—Be-Saw Tire & Rubber Co., News Bldg., Canton, O., soon lets contract 5-story, 40 x 60-ft., and 90 x 300-ft. factory and boiler house. About $100,000. C. H. Be-Saw, pres. W. S. Epperson, News Bldg., Canton, O., archt.

Okla., Henryetta—Missouri, Oklahoma & Gulf R.R. having plans prepared for roundhouse and machine shop here. About $100,000. N. C. Van Natta, Muskogee, ch. engr.

Okla., Shawnee — J. W. Hogan, Tulsa, plans oil refinery. About $300,000.

Idaho, Meridian — Boise Coöperative Creamery Co., Boise, plans to build milk condensary here. About $35,000.

Utah, Salt Lake City—Utah Oil Refining Co., 703 Newhouse Bldg., plans factory. About $50,000. J. C. Howard, gen. mgr.

Ariz., Verde—See "Buildings."

Wash., Seattle—City had plans prepared by J. L. Stannard, engr., for power plant on Cedar River. Plan A, involves 9.4 mi. transmission line, cost, $2,390,630; Plan B, 11.2 mi. transmission line, $2,563,950; Plan C, 8.5 transmission line, $2,242,300; and Plan D, 8.5 transmission line, $1,919,300.

Cal., Fresno—San Joaquin Light & Power Corp., had plans prepared for power plant on King River. Cost between $1,500,000 and $2,500,000. A. G. Wishon, pres.

Cal., Martinez — American Oriental Ship Yards plan to build shipbuilding plant on 35-acre site. W. A. Boole of Moore & Scott Iron Works, Oakland, in charge.

Cal., Oakland—Hanlon Shipbuilding Co., Ft. 5th Ave., plans shipbuilding plant. About $1,000,000.

Cal., Oakland—Union Constr. Co., Oakland, plans to build shipbuilding plant.

Cal., Oroville—Great Western Power Co. purchased 1225-acre site and plans power plant. About $6,000,000.

Cal., San Francisco—International Harvester Co., 201 Potro St., having plans prepared by E. P. Antonovich, archt., 20 Montgomery St., for 4-story factory, Utah and 15th Sts. About $50,000.

Cal., San Francisco — Pacific Coast Can Co. has acquired 5 acre site and plans to build factory. About $1,000,000.

N. B., St. George—J. A. Gregory, St. John, plans to build shipyards here. About $100,000.

Ont., Pembroke — Colonial Lumber Co. plans to rebuild lumber mill recently destroyed by fire. About $75,000.

BIDS DESIRED

N. Y., Albany—(Official)—Until Jan. 8, by W. W. Wotherspoon, supt. pub. wks., Capitol, building barge canal terminal, etc., Contr. No. 207; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Conn., Waterbury—Ludington Machine Co., Printers St., let contract 3-story, 42 x 112-ft. addition to Tracy Bros., 52 Benedict St.

★N. Y., Brooklyn—F. H. Levy Co., 222 44th St., let contract, 2-story, 100 x 100 ft., brick ink factory, 2nd Ave. and 45th St., to F. J. Ashfield, 350 Fulton St., $30,000.

★N. Y., Brooklyn—National Biscuit Co., 10th Ave. and 15th St., New York City, let contract 4-story, 112 x 135-ft. rein.-con. factory, Front and Jay Sts., to Turner Constr. Co., 244 Madison Ave., New York City.

★N. Y., New York—Merrill Spring Co., 525 West 27th St., let contract for addition and alterations to factory, to Standard Concrete Steel Co., 105 West 40th St., $40,000.

★N. J., Harrison—Swift & Co., 154 9th St., Jersey St., let contract, 1-story, 164 x 500-ft. fertilizer plant here, to Schaedel & Bro. Co., 118 Bruce St., Newark, $50,000.

★N. J., Newark—A. Kertez, 571 South 17th St., let contract for garage to Newark Constr. & Investment Co., 800 Broad St., $38,000.

★N. J., Newark—Tidewater Warehouse Co. let contract, 4-story, 70 x 163-ft. brick and rein.-con. warehouse on Blanchard St., to F. Kilgus, Inc., 13 South 6th St. About $75,000.

★Pa., Phila.—Espen-Lucas Machine Co., Front and Girard Sts., let contract, 1-story, 44 x 141-ft. brick machine shop, to Austin Co., Bulletin Bldg., $29,000.

★Pa., Phila.—Phila. & Reading Ry. let contract building engine house and machine shop, Tulip and Emerson Sts., to W. Steel & Sons Co., 30 South 15th St., $326,183. Noted Dec. 6.

Pa., Phila.—B. F. Shaw let contract, 1-story, 50 x 270-ft. factory, to Austin Co., Bulletin Bldg., $25,000.

★O., Bucyrus—American Clay Machinery Co. let contract, 1-story, 100 x 250-ft. munition plant, to Austin Co., 14230 Euclid Ave., Cleveland. About $60,000.

★O., Cleveland—Brown Hoisting Machy. Co., 4403 St. Clair Ave., let contract 1-story, 52 x 182-ft. shipping building to Austin Constr. Co., 14230 Euclid Ave. About $134,300.

★Ind., Greencastle—Hurst & Co., 134 South Pennsylvania Ave., Indianapolis, let contract 3- or 4-story, 90 x 116-ft. distributing building and warehouse, to A. E. Kenner, 744 North 7th St., Lafayette.

★Mich., Detroit — Studebaker Corp., Brush and Piquette Sts., let contract, 4-story, 50 x 235-ft. factory, to Bryant & Detqiler, 2336-39 Dime Bank Bldg., $175,000.

★Ill., Chicago — Chicago Bearing Metal Co., West 43rd St., let contract 1-story, 102 x 226-ft. brick addition, to Scharmer Constr. Co., 139 North Clark St.

★Ill., Chicago—Hughes Electric Heating Co., Waller and Taylor Sts., let contract 1-story brick factory to Lubd Constr. Co., Chicago, $30,000.

★Ill., Chicago — W. Wallet, Jr., 2249-53 Calumet Ave., let contract, 4-story, brick warehouse, to Erickson Constr. Co., 7147 Evans St. About $60,000.

★Ill., Quincy—Reliable Incubator Co., 29th and Chestnut Sts., let contract 2-story, 100 x 160-ft. warehouse, to G. Lange & Son, 1100 Wash St.

★Wis., Beloit—Gardner Machine Co. let contract warehouse and pattern storage to Newton Eng. Co., 185 Mason St., Milwaukee. About $40,000.

★Wis., Eau Claire—United States Auto Gear Shift Co., let contract, 4-story, 65 x 80-ft. rein.con. and brick plant and 20 x 65-ft. office, to R. L. Rickman, Eau Claire. Noted Nov. 29.

★Wis., Milwaukee — G. H. Smith Steel Casting Co., 500 Clinton St., let contract 45 x 100-ft. brick addition to foundry and 4-story, 75 x 100-ft. brick pattern storehouse and office to Klug & Smith, Mack Block.

★Kan., Salina—Robinson Milling Co. let contract brick and rein.-con. flour mill and elevator, to Eberhardt Constr. Co. About $250,000. Noted Dec. 13.

★Okla., Tulsa—H. E. Bagley let contract 3-story, 50 x 140-ft. garage, to W. E. Carlett, Vinita, $25,000.

Wash., Grand Mound—See "Buildings."

★Wash., Tacoma—Griffith Motor Co. let contract building 3-story, 50 x 120-ft. brick and rein.-con. garage to J. E. Bonnell, 760 Commerce St. About $35,000.

★Cal., Hanford—Hanford Mfg. Co., Irwin St., let contract brick plant, to Trewhitt & Shields, Rowell Bldg., Fresno. About $25,000.

BUILDINGS

Proposed Work

Vt., Springfield — Hospital — Springfield Hospital soon lets contract, 2-story, 40 x 65 ft. About $50,000. H. L. Walker, 19-25 West 44th St., New York City, archt.

Mass., Boston—Police Station—City h ing plans prepared by J. McGinniss, arc 16 Arlington St., for 6-story. About $15 000.

Mass., Boston—State—State having pl prepared by J. H. Ritchie, archt., 8 Bea St., for state building on Eastern Sta Agricultural and Industrial Exposition si About $50,000.

Mass., Fall River—Hospital—City pla tuberculosis hospital. About $225,000. C. Johnson, secy. bd. Trustees Municip Hospitals and Dispensaries. Fellows & M Laughlin, 87 Weybosset St., Provide R. I., archt.

R. I., East Providence—Club—Metacom Golf Club, Pawtucket Ave., had plans prepared by W. R. Walker & Son, archts., 1 Custom House, Providence, 3-story, 40 x 100-ft. About $50,000.

N. Y., Hempstead — (Official) — Tow Hall—F. C. Gilbert, town clk., will receiv preliminary sketches until Jan. 29 fo town hall. About $70,000.

N. Y., New York—Cupola—City had pla prepared by J. McComb, Jr., archt., rebuilding City Hall cupola recently destroyed b fire. About $61,500.

N. J., Jersey City—Station—Hudson & Manhattan R.R., 30 Church St., New York City, plans on Henderson St. About $25,000. W. Fiske, pres.

N. J., New Lisbon—Institution—State appropriated $106,000 for additions to Institution for Feeble-Minded.

N. J., Northfield—Asylum—Bd. Freeholders, Atlantic Co., Mays Landing, having plans prepared by S. H. Vaugh, archt., Guarantee Trust Bldg., Atlantic City.

N. J., Skillman—Hospital—State appropriated $104,291 to build additions to Epileptic Village here. D. F. Weeks, supt.

Pa., Harrisburg—School—Bd. Educ. having plans prepared by V. T. Ritter, archt., North American Bldg., for brick and stone. About $400,000.

Ill., Chicago — Office—See "Industrial Works."

Ill., Chicago—Theater—B. and A. J. Balaban and M. and S. Katz, having plans prepared by C. W. and G. L. Rapp, archts., 69 Washington St., for 5-story, West 12th St. About $750,000.

Ill., Chicago—Theater and Mercantile—W. W. Ahlschalger, 111 West Washington St., plans 10-story, 150 x 200-ft. About $335,000.

Wis., Ashland — Sanitarium — Ashland, Iron and Bayfield Cos. plan to build. About $100,000.

Wis., Madison—Hotel—Kletzsch Realty Co. having plans prepared by Claude & Starek, archts., for 7-story, brick and rein.-con. About $350,000.

Wis., Milwaukee—Auditorium — Milwaukee Auditorium Co., 5th and Cedar Sts., soon lets contract repairing and altering. About $60,000. J. C. Grieb, mgr. A. C. Clas, Colby Abbott Bldg., archt.

Wis., Rice Lake—Hospital — St. Joseph Hospital, having plans prepared by H. Wilhagen, archt., 513 West 2nd St., Ashland, for 3-story. About $65,000.

Ia., Des Moines—Court House—Polk Co. having plans prepared for 3-story, 82 x 178-ft. with 60 x 42-ft. wing. About $200,000. F. J. Alber, co. aud. Sawyer & Watrous, archts., 303 Youngerman Bldg., and Kraetsch & Kraetsch, S & L Bldg., associate archts.

Ia., Grandview—School—Bd. Educ. having plans prepared by Keffer & Jones, archts., Youngerman Bldg., Des Moines. Bonds for $73,000 voted for project.

Ia., Spencer—School—Bd. Educ. soon lets contract for alteration and addition. About $70,000. J. D. Chubb, 109 North Dearborn St., Chicago, archt.

Minn., Minneapolis—School—Bd. Educ. soon lets contract for Longfellow School, 30th Ave. South, and 31st St., 2-story, rein.-con. and brick. R. C. L. Haxby, City Hall, archt.

Minn., Owatonna — High School — City election soon to vote on $100,000 bonds to build high school.

Minn., St. Paul—Courthouse, etc. — City plans. About $500,000. H. McColl, comr. pub. safety.

Minn., Waconia—High and Grade School —Bd. Educ. receives bids in February for 2-story, 60 x 110-ft. K. T. Snyder, 1133 Plymouth Bldg., Minneapolis, archt.

Kan., Concordia—See "Industrial Works."

Buildings (Continued)

Kan., Kansas City—Passenger Station—Kansas City Terminal Ry. receives bids about Jan. 1, for station on 7th St. and Union Pacific tracks. About $100,000. J. V. Hanna, Union Station, Kansas City, Mo., ch. engr. A. H. Buckley, 823 Gloyd Bldg., Kansas City, Mo., archt.

Kan., Leavenworth—Community — City voted $50,000 bonds to build community building. T. B. Bolman, pres. bd. educ.

Kan., Wichita—Church—First Methodist congregation plans 1-story. About $100,000. O. A. Boyle, 125 North Rock Island Ave., secy. bd. J. Gaisford, Goodwyn Institute Bldg., Memphis, Tenn., archt.

Neb., Omaha—Church and Parish House—Central congregation having plans prepared by G. B. Puntz, archt., 4033 Omaha Natl. Bank Bldg. About $140,000. G. B. Payne, chn. bldg. com.

S. D. Groton—High and Grade School—Bd. Educ. having plans prepared by F. Broomhall, archt., Alworth Bldg., Duluth, Minn., for 2-story. About $75,000.

Mont., Bozeman—Office — E. B. Martin and E. P. Tipton plan to build on Curtis St. and 3rd Ave. About $50,000.

Mo., Kansas City—Temple—Ivanhoe Masonic Lodge had plans prepared by Smith, Rea & Lovett, archts., 602 Finance Bldg., for 3-story, 90 x 125-ft. stone and rein.-con. About $175,000. J. O. Christense, 3131 Campbell St., chn. bldg. com. Noted Nov. 22.

Mo., Kansas City—Theater—A. E. Elliott, 105 East 12th St., having plans prepared by C. B. Sloan, archt., 321 East 11th St., for 1-story, brick, terra cotta, and rein.-con. About $50,000.

Tex., Dallas—Office — Texas & Pacific R.R. plans 6-story addition, Elm and Griffin Sts. E. F. Mitchell, Dallas, ch. engr.

Tex., San Antonio—Office—Central Trust Co., 210 West Commerce St., plans 12-story, rein.-con., Houston and Navaro Sts. About $400,000.

Okla., Ardmore—Bank—1st Natl. Bank, Ardmore, having plans prepared by Hoggson Bros., archts., 485 5th Ave., New York City, for 1-story, 50 x 98-ft. About $120,000. D. Lucy, pres.

Colo., Colorado Springs—Sanatorium—Modern Woodman Sanatorium having plans prepared for new buildings and other improvements. About $100,000. J. A. Rutledge, supt.

Utah, Salt Lake City—Temple—Logan Temple plans to rebuild temple recently damaged by fire. About $100,000.

Ariz., Verde—(Liberty P. O.)—Business, etc.—United Verde Extension Mining Co. having plans prepared by Lescher & Kibbey, archts., Phoenix, for concrete and brick business buildings, residences, sewers, water and electric lighting systems for town of 2000 people to be built on new townsite near smelter. About $2,000,000.

Wash., Olympia—High School—Bd. Educ. soon lets contract, 2-story, brick. William Winlock Miller High School. About $100,000.

Ore., Baker—Swimming Pool—City defeated $54,000 bonds for swimming pool. Noted Nov. 29.

Cal., Los Angeles—Office — Los Angeles Stock Exchange Co., I. W. Hellman Bldg., having plans prepared by Train & Williams, archts., Exchange Bldg., for 19-story.

Ont., Toronto—Restaurant—Childs Co., 200 5th Ave., New York City, had plans prepared by Amsterdam Bldg. Co., Inc., archts., 140 West 42nd St., New York City, for restaurant on Yonge St. here. About $100,000.

BIDS DESIRED

N. Y., Brooklyn — (Official) — Nurses' Home—Until Dec. 31, Dept. Pub. Charities, Municipal Bldg., New York City, for addition on grounds of Kings Co. Hospital. J. A. Kingsbury, comr.

N. Y., Greycourt — (Official)—Colony—Until Dec. 27, by B. G. Lewis, comr. dept. of correction, Municipal Bldg., New York City, building women's farm colony, buildings to be 4-story, 404 x 400 and 40 x 200 ft. About $225,000. Noted Nov. 8.

N. Y., New City—(Official)—Hospital—Until Dec. 27, by Rockland Co. Comrs., for tuberculosis hospital, 2-story, 28 x 200-ft., at Summit Park. About $55,000. Tooker & Marsh, 101 Park Ave., New York City, archts. Noted Nov. 22 under Suffern.

Pa., Phila.—(Official)—Elevated Railway Stations—Until Dec. 27, by W. S. Twining, dir. Dept. of City Transit, for brick and rein.-con., Contr. Nos. 535 and 536. Advertised in this issue.

O., Cleveland—(Official)—School—Until Jan. 7, by clk. Bd. Educ., Rockwell Ave. and East 6th St., completing North Doan School Annex. About $100,000.

O., Lima—(Official)—Community House—Until Dec. 24, by J. Behr, 1201 North Main St., for 3-story, 101 x 146-ft. About $85,000. A. C. De Curtins, 503 Opera House Blk., archt. Noted Dec. 13.

S. D., Huron—(Official) — Junior High School—Until Jan. 16, by Bd. Educ. W. Habel, clk. Miller, Fullenwider & Dowling, 6 North Michigan Ave., Chicago, archts.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Northampton—Infirmary—Smith College, let contract, 2½-story, 80 x 95-ft., to D. A. Sullivan, 353 Prospect Heights. Cost, between $65,000 and $80,000. Noted Oct. 25.

Mass., Springfield—School—Bd. Educ. received lowest bid building Carew Street school, from D. W. Mellen Co., 293 Bridge St., $53,532.

★Conn., Hartford—School—Bd. Educ. let contract addition in Washington School Dist., to Ahern & Welch, Inc., 721 Main St. About $69,990.

★N. Y., Brooklyn—Bank—Metropolitan Trust Co., 60 Wall St., New York City, let contract additions and alterations on Fulton St., to W. Kennedy Constr. Co., 215 Montague St. About $50,000.

★N. Y., New York—Office—W. R. Grace Co., 7 Hanover Sq., let contract 7-story, 42 x 112-ft. brick and rein.-con., on Pearl St., to Whitney Co., 101 Park Ave. About $250,000. Noted Nov. 29.

★N. Y., New York—Theater and Office—Wendell Estate, 175 Bway., let contract 6-story, 100 x 268-ft. brick, to Fleischmann Constr. Co., 531 7th Ave.

★N. J., Jersey City—Nurses' Home and Hospital—City let contract, addition to Jersey City Hospital, to W. H. & F. W. Cane, Woolworth Bldg., New York City, $800,000. Noted Nov. 29.

★Pa., Harrisburg—Junior High School—Bd. Educ. let contract, 19th and Chestnut Sts., to A. Wildman, Harrisburg, $272,000.

★Mich., Detroit — Hospital—Ford Hospital, Hamilton and Grant Blvds., let contract addition, to A. A. Albrecht Co., 1130 Penobscot Bldg., $1,500,000.

★Ill., Monmouth—Y. M. C. A. let contract, 3-story, 75 x 100-ft., to A. W. Stoolman, Champaign, $75,000. Noted June 14.

Ia., Corinth—School—Bd. Educ. received low bid Nov. 26, for 2-story, brick and rein.-con., from W. F. Kucharox Co., 622 Hubbell Bldg., Des Moines. About $55,580. Noted Nov. 22.

★Ia., Spirit Lake—Home—Knight Templars, of Iowa, let contract to J. B. Nelson & Son, Mankato, Minn., $100,000. Noted Aug. 9.

★Ia., Strahan—School—Bd. Educ., Consolidated Dist., let contract, 2-story, 82 x 86-ft. cut stone, rein.-con. and terra cotta, to J. Welch, Nebraska City, Neb., $50,000. Noted Nov. 15.

★Minn., Rochester—Store and Hotel—Knowlton Realty Co., let contract, 6-story, 100 x 140-ft. to G. Schwartz & Co., Stebbins Bldg., Rochester, $275,000. Noted Oct. 18.

Wash., Grand Mound—Cottage, Etc.—State Bd. Control, Olympia, received lowest bid building cottage and power plant from Warrack Constr. Co., Arcade Bldg., Seattle, $69,500. Noted Nov. 22.

Wash., Olympia—Temple—State received lowest bid building temple of justice from E. G. Peters Co., Seattle, $197,118. Noted Nov. 15.

★Cal., Brawley—Hotel — Brawley Hotel Corp. let contract, 3-story, 95 x 150-ft., to Milwaukee Bldg. Co., Wright & Callendar Bldg., Los Angeles. About $85,000.

FEDERAL GOVERNMENT WORK

Proposed Work

Pa., Phila.—Plumbing — Bureau Yards and Docks, Navy Dept., Wash., preparing plans for plumbing in various buildings. About $25,500; Specifications No. 2753.

Wash., D. C.—Dry Kiln and Transfer Table—Bureau Yards and Docks, Navy Dept., Wash., having plans prepared. About $20,000; Specification No. 2744.

Va., Norfolk—Asphalt—Bureau Supplies and Accounts, Navy Dept. Wash., soon receives bids furnishing at Navy Yard, Norfolk, 300,000 lb. asphalt paving in oil barrels; 300,000 lb. No. 1, refined Trinidad asphalt and 300,000 lb. Val der Travers asphalt; Schedule No. 1610.

Cal., Mare Island—(Vallejo P. O.)—Stone—Bureau Supplies and Accounts, Navy Dept., Wash., soon receives bids furnishing at Navy Yard, Mare Island, 36,000 tons broken stone, Schedule No. 1634.

BIDS DESIRED

Mass., Chelsea—Roads—Until Jan. 14, by Bureau Yards and Docks, Navy Dept., Wash., building roads for Naval Hospital. About $15,000; Specification No. 2751.

N. Y., Brooklyn — Superstructure to Power House—Until Jan. 7, by Bureau Yards and Docks, Navy Dept., Wash., building at Naval Hospital, Brooklyn; Specification No. 2585.

Pa., Ft. Mifflin—Wooden Pier and Bulkhead—Until Dec. 24 (Extension of date) by Bureau Yards and Docks, Navy Dept., Wash. Noted Dec. 13.

Md., Annapolis — Laundry Equipment, Etc.—Until Jan. 7, by Bureau Yards and Docks, Navy Dept., Wash., furnishing at Bancroft Hall, Annapolis. About $38,500; Specification No. 2743.

La., Barataria—Radio Towers and Tanks—Until Jan. 21, by Bureau Yards and Docks, Navy Dept., Wash., building at Barataria Bay. About $35,000; Specification No. 2686.

Kan., Eldorado—Post Office—Until Jan. 15 (extension of date) by J. A. Wetmore, superv. archt., treas. dept., Wash. Noted Dec. 6.

Cal., Bakersfield—Post Office—Until Jan. 7, by J. A. Wetmore, superv. archt., treas. dept., Wash.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★R. I., Melville — Dredging — Bureau Yards and Docks, Navy Dept., Wash., let contract dredging at U. S. Naval Coal Depot, to J. S. Packard Dredging Co., 1004 Turks Head Bldg., Providence, $27,000. Noted Dec. 6.

★R. I. Newport—Garage—Bureau Yards and Docks, Navy Dept., Wash., let contract building at Naval Training Sta., to T. F. Keeher, Harrison Ave., $11,997. Noted Dec. 13.

★Conn., New London—Cranes—Bureau Yards and Docks, Navy Dept., Wash., let contract 5-ton electric crane, to Penn Bridge Co., Beaver Falls, Pa., $7500; 2 hand power cranes, to Cameron Eng. Co., East Stroudsburg, Pa., $900. Noted Dec. 13.

★Pa., Ft. Mifflin—Ammunition Box Repair House and Central Heating Plant—Bureau Yards and Docks, Navy Dept., Wash., let contract, to Ward-Yardley Co., 1737 Filbert St., Phila., $47,168. Noted Dec. 13.

Pa., Fort Mifflin—Chief Gunners Quarters—Bureau Yards and Docks, Navy Dept., Wash., received bids building at Naval Ammunition Depot (a) work complete (b) work complete using airlock brick for exterior walls from grade to 2nd floor level (c) common brick for exterior walls to 2nd story level from Evans Constr. Co., 9 South 18th St., Phila., (a) $9972; (b) $10,272; (c) $10,222; Dawson Constr. Co., May Bldg., Pittsburgh, (a) $10,500; (b) $12,500; (c) $12,000; W. W. Austine & Co., 1218 Filbert St., Phila., (a) $13,945; (b) $14,149; (c) $14,121.

★Pa., Ft. Mifflin—Marine Barracks—Bureau Yards and Docks, Navy Dept., Wash., let contract building at Naval Sta., to Dawson Constr. Co., May Bldg., Pittsburgh, $66,000. Noted Dec. 13.

★Pa., Ft. Mifflin—Office—Bureau Yards and Docks, Navy Dept., Wash., let contract to Barney-Ahlers Constr. Co., West 40th St., New York City, $17,500. Noted Dec. 13.

★Pa., Phila. — Cranes — Bureau Yards and Docks, Navy Dept., Wash., let contract installing in Galvanizing Plant at Navy Yard, to Penn Bridge Co., Beaver Falls, $19,900.

★Pa., Phila.—Heating System—Bureau Yards and Docks, Navy Dept., Wash., let contract installing heating system in foundry, to Mathis Bros., Archer and Canal St., Chicago, $49,000. Noted Dec. 13.

★Pa., Pittsburgh — Warehouse — War Dept., Brig. Gen. I. Littell, Wash., let contract to Austin Co., Bulletin Bldg., Phila.; cost plus percentage.

Federal Government Work (Continued)

★Md., Baltimore—Hospital—War Dept., Surgeon General's Office, Wash., let contract to J. H. Miller, Baltimore; cost plus percentage.

★Md., Indian Head—Extension to Power House—Bureau Yards and Docks, Navy Dept., Wash., let contract, to Austin Co., Bulletin Bldg., Phila. About $40,000; cost plus percentage. Noted Nov. 29.

★Md., Indian Head — Blending Towers —Bureau Yards and Docks, Navy Dept., Wash., let contract 2 blending towers, to Austin Co., Bulletin Bldg., Phila. About $78,000; cost plus percentage.

Md., Indian Head—Magazine Buildings —Bureau Yards and Docks, Navy Dept., Wash., let contract for 2 magazine buildings, to Austin Co., Bulletin Bldg., Phila. About $80,000; cost plus percentage.

★Md., Indian Head—Pulping and Poaching House—Bureau Yards and Docks, Navy Dept., Wash., let contract, to Austin Co., Bulletin Bldg., Phila. About $34,000; cost plus percentage.

★Md., Indian Head—Quarters—Bureau Yards and Docks, Navy Dept., Wash., let contract 5 sets of quarters, to Austin Co., Bulletin Bldg., Phila. About $35,000; cost plus percentage.

★Wash., D. C.—Cranes—Bureau Yards and Docks, Navy Dept., Wash., let contract furnishing three 50-ton locomotive jib cranes in Norfolk, Va., Phila. and New York Navy Yards to Penn Bridge Co., Beaver Falls, Pa., $393,480. (One for each Navy Yard.) Noted Dec. 6.

Wash., D. C.—Electric Traveling Cranes —Bureau Yards and Docks, Navy Dept., Wash., received bids (a) work complete (b) (c) and (d) alternate bids from Manning, Maxwell & Moore, Inc., 119 West 40th St., New York City, (a) $35,924; Chesapeake Iron Wks., Westport, Md., (d) (one 25-ton motor crane) $15,500, two 10-ton motor cranes, $17,200; Niles, Bement Pond Co., 111 Bway., New York City (b) $26,250, (d) $16,550. (f) (alternate bid) $16,400; Cleveland Crane & Eng. Co., Wickliffe, O., (b) $29,245, (d) $16,150. Noted Dec. 13.

Wash., D. C.—Motor Generator Sets—Bureau Yards and Docks, Navy Dept., Wash., received low bids furnishing at Phila., Norfolk, Va., New York and Wash., D. C., Navy Yards as follows: Item 1, net price of equipment as specified for substation New York Navy Yard, item 2, net price equipment for substation 12 New York Navy Yard, item 3, net price equipment for substation north of new foundry, Phila. Navy Yard, item 4, net price equipment on fitting-out pier Phila. Navy Yard, item 5, net price equipment in machine shop, Norfolk Navy Yard, item 6, net price equipment on fitting-out pier Norfolk Navy Yard, item 7, net price for 3 motor-generator sets for substation in Gun Shop, Wash., D. C., Navy Yard, item 8, alternate bid—1a, 2a, 3a, 4a, 5a, 6a, 7a, 8a, reduction omitting all factory inspection tests and substituting regular routine tests; from Westinghouse Electric Mfg. Co., 803 Hibbs Bldg., Wash., D. C., (1) $14,410, (2) $8628, (3) $25,016, (4) $25,016, (5) $19,152. (6) $26,148. (7) $33,320. (8) $29,245, 1a to 8a lump sum $5300.

Allis-Chalmers Mfg. Co., Milwaukee, Wis., (1) $16,475, (2) $9930, (3) $31,440, (4) $31,440, (5) $20,680, (6) $31,440, (7) $31,220, (8) $36,490, (1a) $16,275, (2a) $9730, (3a) $31,040, (4a) $31,040, (5a) $20,280, (6a) $31,040; (7a) $30,470, (8a) $35,740.

Burke Electric Co., 12th and Cramberry St., Erie, Pa., (1) $19,171, (2) $10,150; (3) $27,310, (4) $27,310, (5) $24,728, (6) $27,338, (7) $41,634, (1a) deduct $500, (2a) deduct $500, (3a) deduct $500, (4a) deduct $500, (5a) deduct $500, (6a) deduct $500, (7a) deduct $500.

Wash,. D. C.—Range Finding Tower and Reconstruction of Buildings Nos. 105 and 112—Bureau Yards and Docks received bids Dec. 17 installing at Navy Yard, Wash., (a) work complete (b) amount deducted from (a) if new roofs of additions are omitted and existing roofs are raised (c) amount added or deducted from (a) and (b) if concrete piles are substituted for wood piles (d) amount to be added or deducted if reinforced concrete frame is substituted for steel frame of extenson (e) amount added or deducted if asbestos roofing is substituted for pitch and gravel (or slag) (f) amount added or deducted from (a) and (b) if air-lock brick is substituted for brick and terra cotta tile (g) amount added or deducted if steel toilet partitions are substituted for slate (h) amount deducted if interior is simplified (i) amount deducted from (a) and (b) if all lathing and plastering included here are omitted except in 6th story of extension, (j) price per lin.ft. wood piles in place over or under length specified price for all wood piling as specified from:

Richardson & Burgess, Inc., 616 Colorado Bldg., Wash., (a) $293,248, (b) deduct $13,268, (c) add $2188, (d) deduct $3144, (e) add $650, (f) deduct $2104, (g) deduct $100, (h) deduct $1087, (i) deduct $14,851, (j) $3392, $0.69 per ft.

Warren Moore & Co., Colonial Bldg., Phila., (a) $332,721, (b) deduct $27,400, (c) add $2800, (d) deduct $8151, (e) add $524, (f) add $2000, (g) deduct $2000, (h) deduct $1000, (i) deduct $20,000, (j) add $0.60 deduct $.40.

Boyle-Robinson Constr. Co., 601 Evans Bldg., Wash., (a) $334,202, (b) deduct $1900, (c) add $3175, (d) deduct $7000, (e) add $750, (f) add $1000, (h) deduct $1000, (i) deduct $2500, (j) add $0.45 deduct $0.35. Noted Dec. 13.

Wash., D. C.—Seaman Gunner's Quarters—Bureau Yards and Docks, Navy Dept., Wash., received bids Dec. 17: (a) work complete; (b) amount added or deducted from (a) if air-lock brick is substituted for face brick; (c) amount added or deducted if selected common brick is substituted for face brick (d) amount added or deducted if artificial stone is substituted for Indiana limestone (e) amount added or deducted if asbestos roofing is substituted for pitch and gravel; (f) amount added or deducted if gypsum block is substituted for hollow terra cotta tile; (g) amount added or deducted if metal sash and frames are substituted for wood sash and frames of basement; (h) amount added or deducted if metal casement sash and frames are substituted for all wood sash and frames above basement; (i) amount added or deducted if wood counterbalanced windows are substituted for all windows shown above basement; (j) amount added or deducted if metal counterbalanced windows are substituted for all windows shown above basement; (k) amount added or deducted if metal covered doors and frames are substituted for wood doors and frames in all exterior door openings (l), (m), and (n) are alternate bids on government specifications, from:

Summer Sollitt Co., Pullman Bldg., Chicago, (a) $150,000; (b) add $2000; (c) deduct $2500; (d) deduct $100; (e) add $300; (f) deduct $500; (g) add $3000; (h) add $11,000; (i) deduct $1000; (j) add $4000; (k) add $2300; (l) deduct $300; (m) $1.50; (n) $0.05.

Warren Moore & Co., Colonial Trust Bldg., Phila., (a) $58,155; (b) add $3600; (c) deduct $2934; (d) deduct $593; (e) add $350; (g) add $1273; (h) add $7575; (i) add $300; (j) add $1700; (k) add $710; (l) deduct $300; (m) $7700; (n) $625.

King Lumber Co., Charlottesville, Va., (a) $174,174; (b) $175,474; (c) $173,474; (d) $174,274; (e) $174,974; (f) $174,174; (g) $176,474; (h) $181,474; (i) $176,474; (j) $177,474; (k) $178,474; (l) $178,474; (m) $1.00; (n) $0.15 per sq.ft.

★Wash., D. C.—Structural Steel—Bureau Yards and Docks, Navy Dept., Wash., rescinded contract let to Pittsburgh Des Moines Steel Co. for structural steel for Seaplane Hangar, Hampton Roads, Va., and relet same to Richmond Structural Steel Co., 18th and Dock St., Richmond, Va., $20,390. Noted Nov. 22.

Fla., Key West—Tank and Tower—Comr. Fisheries Dept., Wash., D. C., received bids Dec. 6 building at Biological Sta., from Williams-Gerstle Eng. Co., 198 Bway., New York City, $4737; time, 90 days. Simmons, Hartenstein & Whitten, Inc., Charlotte, N. C., $6662; time, 90 days. Noted Nov. 29.

★Fla., Pensacola—Wells and Pumping Machinery—Bureau Yards and Docks, Navy Dept., Wash., let contract installing at Navy Aëronautic Sta., to Layne & Bowler Co., Randolph Bldg., Memphis, Tenn., $17,900.

★Ia., Des Moines—Hospital—War Dept., Surgeon General's Office, Wash., let contract to C. Weitze & Son, 713 Mulberry St.; cost plus percentage.

★Mo., St. Louis — Warehouse — War Dept., Brig. Gen. I. Littell, Wash., let contract to Westlake Constr. Co., 713 Locust St.; cost plus percentage.

Tex., Denton—Post Office — J. A. Wetmore, superv. archt., treas. dept., Wash., received bids Dec. 17, from Dreher Constr. Co., Marquette Bldg., Chicago, $56,961; J. H. Wiese, 1301 City Natl. Bank Bldg., Omaha, Neb., $58,340; J. F. McKnight, Hallettsville, $59,300. Noted Nov. 8.

Cal., Mare Island—(Vallejo P. O.)—Incinerator—Navy Yard, Mare Island, received bids building at Marine Barracks, Navy Yard, from Universal Eng. Co., 462 Fillmore St., San Francisco, (a) time 75 days; (b) 5444—75 days $5283—55 days; (d) $6237—75 days $5444—75 days; (f) $5283—55 Borge Incinerator Corp., 1216 Fl Bldg., New York City, (a) $7527—45 (b) $5902—45 days; (c) $4940—30 (d) $7527—45 days; (e) $5902—45 (f) $4940—30 days. W. McCanse, D Natl. Bank Bldg., Durant, Okla., $8869—60 days; (b) $6369—60 days $6110—45 days; $8800—60 days; (f) —45 days. Noted Nov. 15.

MISCELLANEOUS

Proposed Work

Pier and Bulkhead—Brooklyn, N. —Todd Shipyards Corp., 15 Whitehall St., New York City, having plans prepared for timber pier and bulkhead, 25 ft. wide, south of 22nd St. About $65,000.

Signal Tower, etc.—Norristown, Pa.—Phila. & Reading R.R. plans signal tower, battery house and 2 signal bridges here. S. T. Wagner, Reading Terminal, Phila., ch. engr.

Terminal—Cape Charles, Va. — Pennsylvania R.R. acquired 3000-ft. site on Little Creek near here and plans to build deep water terminal. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Tunnel — Henderson, Tenn.—(Official)—Gulf, Mobile & Northern R.R. having plans prepared by Coverdale & Colpitts, engrs., 66 Bway., New York City, for 500 ft. tunnel to be driven on new extension in Chester Co. B. V. Wright, Laurel, Miss., ch. engr.

Retaining Wall—Cleveland, O.—(Official) —City granted Cleveland, Cincinnati, Chicago & St. Louis R.R. permission to build rein.-con. retaining wall along 11th St. C. A. Paquette, Cincinnati, ch. engr.

Dumper—Hamilton, O.—See "Industrial Works."

Levee Improvement—Spirit Lake, Ia.—Dickinson Co. sold $500,000 bonds for levee improvements. A. MacDonald, co. aud.

Dam Repairs—Delta, Colo.—Secy. Delta Enterprise Ditch Co. soon lets contract repairing dam across Snyder Gulch near here.

Transmission Line—Wash., Seattle—See "Industrial Works."

Dykes—Montreal, Que. — See "Water-Works."

BIDS DESIRED

Transmission Line—Fremont, N. C.—Until Jan. 3, by F. B. Mayo, mayor, building 40-mi. transmission line, including sub-station, arc light and distributing systems. B. O. Austin, Raleigh, engr.

Bulkhead and Spillway—Sac City, Ia.—See "Excavation and Dredging."

Dam—Eureka, Kan.—Until Dec. 27, by City. About $30,000. J. W. Kenner, clk

Dam—Calgary, Alta.—Until Jan. 15, by Alberta Hydro-Electric Co., Ltd., Dominion Bank Bldg., building several power dams along Bow River; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Approach Work—St. George, S. I., N. Y. —C. D. Van Name, pres. Richmond boro., received bids for approach work for additional court house in Richmond Co., on Jay and DeKalb St. and Stuyvesant Pl., from J. M. Knopp, 544 West 43rd St., New York City, $51,994; P. T. Cox Contg. Co., 154 Nassau St., New York City, $53,400; P. J. Carlin Constr. Co., 1123 Bway., New York City, $54,792.

★Ore Dock — Superior, Wis. — Great Northern Ry., Co. let contract to A. Guthrie & Co., Inc., 366 Jackson St., St. Paul, Minn. About $1,000,000.

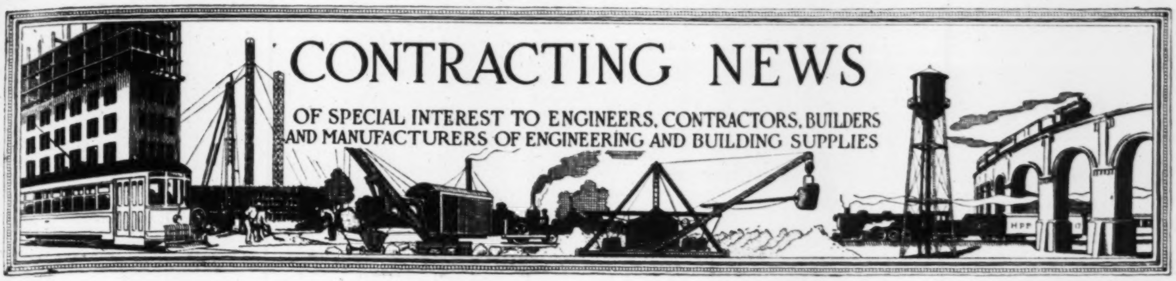
★Portland Cement—Minneapolis, Minn. —(Official)—City let contract furnishing 100,000 bbl. cement, to Landers, Morrison, Christenson Co., Plymouth Ave. and North 1st St., $2.48 per bbl.; 25,000 bbl. Hydraulic Pressed Brick Co., 211 South 4th St., $2.48 per bbl.; 5c. per barrel discount for cash in 10 days. Noted Nov. 22.

★Elimination of Grade Crossings—Dallas, Tex.—(Official)—Missouri, Kansas & Texas R.R. let contract grade separation at Lemmon Ave., Cedar Springs Rd. and Maple Ave., raising present undergrade crossings at Quick Hall and Bowen Sts., to List & Gifford Constr. Co., 216 Dwight Bldg., Kansas City, Mo. About $350,000.

★Dock—Seattle, Wash.—Great Northern Ry. let contract extension to dock, to Grant, Smith & Co., Pioneer Bldg., St. Paul, Minn. About $50,000.

CONTRACTING NEWS

OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES



Proposals

For Proposals Advertised See Pages 50 to 54, Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
Dec. 28.	Tonawanda, N. Y.	Dec. 27
Jan. 3.	Bonifay, Fla.	Dec. 27
Jan. 3.	Tipton, Kan	Dec. 20
Feb. 5.	Jersey City, N. J.	Dec. 27

SEWERS

Dec. 27.	New York, N. Y.	Dec. 20
Dec. 30.	Rocky River, O.	Dec. 20
Dec. 31.	St. Paul, Minn.	Dec. 27
Jan. 3.	Union Grove, Wis.	Dec. 20
Jan. 7.	Westfield, N. J.	Dec. 20
Jan. 8.	Miami, Okla.	Dec. 20
Feb. 1.	Toledo, O.	Dec. 13

BRIDGES

Dec. 29.	Troy, N. Y. Adv. Dec. 13 and 20.	Dec. 13
Jan. 3.	Anoka, Minn.	Dec. 20
Jan. 4.	Richmond, Va. Adv. Dec. 20 and 27.	Dec. 20
Jan. 8.	Salinas, Cal.	Dec. 13
Jan. 9.	Lodge Grass, Mont.	Dec. 20
Jan. 9.	Hardin, Mont.	Dec. 27
Jan. 15.	Eureka, Cal.	Dec. 27

STREETS AND ROADS

Dec. 27.	New York, N. Y.	Dec. 20
Dec. 28.	Webster Springs, W. Va.	Dec. 13
Dec. 29.	Huntington, Ind.	Dec. 6
Dec. 31.	Bay Minette, Ala.	Dec. 6
Dec. 31.	California	Dec. 20
Jan. 2.	Alexandria, La.	Dec. 13
Jan. 3.	Michigan	Dec. 27
Jan. 4.	Richmond, Va.	Dec. 20
Jan. 7.	Pasco, Wash.	Dec. 20
Jan. 7.	Portsmouth, O.	Dec. 27
Jan. 7.	Louisiana	Dec. 27
Jan. 7.	California	Dec. 27
Jan. 8.	Quincy, Fla.	Dec. 27
Jan. 8.	Wenatchee, Wash.	Dec. 20
Jan. 8.	Oregon	Dec. 20
Jan. 9.	Sapulpa, Okla.	Dec. 27
Jan. 21.	Lansing, Mich. Adv. Dec. 27.	Dec. 27

EXCAVATION AND DREDGING

Dec. 31.	Glenwood, Minn.	Dec. 20
Jan. 3.	Sac City, Ia.	Dec. 20
Jan. 9.	Tuscola, Ill.	Dec. 20
Jan. 11.	Walker, Minn.	Dec. 20
Jan. 11.	Phila., Miss.	Dec. 27
Jan. 12.	Monticello, Ind.	Dec. 27

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Jan. 7.	Palmdale, Cal.	Dec. 27
Jan. 8.	Albany, N. Y. Adv. Dec. 20.	Dec. 20

BUILDINGS

Dec. 31.	Brooklyn, N. Y.	Dec. 20
Dec. 31.	Syracuse, N. Y.	Dec. 27
Jan. 1.	Wichita, Kan.	Nov. 22
Jan. 3.	Peabody, Kan.	Dec. 27
Jan. 5.	Springfield, Vt.	Dec. 27
Jan. 7.	Cleveland, O.	Dec. 20
Jan. 7.	Chenango Bridge, N. Y.	Dec. 27
Jan. 8.	Dodge Center, Minn.	Dec. 13
Jan. 15.	New York, N. Y.	Nov. 29
Jan. 15.	Waukesha, Wis.	Dec. 27
Feb. 15.	Duluth, Minn.	Dec. 27
Jan. 16.	Huron, S. D.	Dec. 20

FEDERAL GOVERNMENT WORK

Jan. 3.	Distribution System — San Pedro, Cal.	Dec. 27
Jan. 4.	Buildings — Grande Isle, La. Adv. Dec. 6 and 13.	Dec. 6
Jan. 5.	Jetty Work — Jacksonville, Fla. Adv. Dec. 13.	Dec. 13
Jan. 7.	Post Office — Shawnee, Okla.	Dec. 6
Jan. 7.	Electric Traveling Cranes——Brooklyn, Y.	Dec. 13
Jan. 7.	Post Office — Bakersfield, Cal.	Dec. 20
Jan. 7.	Laundry Equipment, etc.—Annapolis, Md.	Dec. 20
Jan. 7.	Power House Superstructure—Brooklyn, N. Y.	Dec. 27
Jan. 11.	Dredging — Wilmington, Del. Adv. Dec. 27.	Dec. 27
Jan. 14.	Post Office—Owego, N. Y. Adv. Dec. 13 and 20.	Dec. 13
Jan. 14.	Roads—Chelsea, Mass.	Dec. 20
Jan. 14.	Hospital—Chelsea, Mass.	Dec. 27
Jan. 15.	Post Office — Eldorado, Kan.	Dec. 20
Jan. 18.	Lockgates—Cincinnati, O.	Dec. 27
Jan. 21.	Radio Towers and Tanks—Barataria, La.	Dec. 20
Jan. 28.	Post Office—Sunbury, Pa.	Dec. 6
Feb. 5.	Excavators—Denver, Colo.	Dec. 27

MISCELLANEOUS

Jan. 2.	Improving Harbor — Newport, Ore. Adv. Nov. 29 to Dec. 13.	Nov. 29
Jan. 3.	Transmission Line — Fremont, N. C.	Dec. 20
Jan. 5.	Levee—Chamois, Mo. Adv. Dec. 13 and 20.	Dec. 13
Jan. 8.	Pier—Philadelphia, Pa.	Dec. 27
Jan. 15.	Dam—Calgary, Alta. Adv. Dec. 20.	Dec. 20
Feb. 11.	Harbor Improvement—Mobile, Ala.	Dec. 27

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. J., Hackensack — Bd. Pub. Utility granted permission to Hackensack Water Co. to issue common stock for $500,000; proceeds to be used for improvements.

N. J., Perth Amboy—City having plans prepared building reservoir with initial capacity of 40,000,000 gal. and ultimate capacity of 156,000,000 gal., including 10,000 ft. pipe to connect new reservoir with city system and building new force main across Raritan River. G. A. Johnson, city engr.

Pa., Harrisburg — Lebanon Consolidated Water Co. filed notice with Pub. Serv. Comn. for $520,000 bond issue for improvements.

Pa., Yoe—Boro. election soon to vote on bond issue to build water system.

W. Va., Wheeling—City plans to install new pumping station. C. B. Cooke, city engr.

Miss., Wiggins—City having plans prepared by X. Kramer, engr., Magnolia, improving water and electric-light plants.

Tenn., Knoxville — City plans to build water system through lower South Knoxville to Vestal. About $30,240 for pipe, $2000 for hydrants, $4060 for gate valves, etc. J. B. McCalla, city engr. Noted Oct. 4.

O., Canton—City having plans prepared building storm water sewer on Harrisburg Rd., N. E. W. E. Sarver, city engr.

O., Lorain—City will issue $90,000 bonds to improve pumping plant, including new basins, wells and machinery for filtering plant. C. C. Miller, city engr. Noted Sept. 12.

Ill., La Moille—(Official)—City rejected bids improving water system, including water mains, fire hydrants, etc. Noted Dec. 6.

Minn., Nashwauk—City plans to build steel water reservoir.

Kan., Ogden—City voted $12,000 bonds to build water system. Noted Nov. 22.

N. D., Wilton—City had plans prepared building water system.

Mont., Eureka — City will issue $16,000 bonds to build water system.

Tex., Brady—City election Jan. 8 to vote on $25,000 bonds to build water system.

Tex., Higgins—City issued $20,000 bonds to build water system.

Okla., Hartshorne—City voted $17,500 bonds to improve water-works system. S. Aldridge, city clk. Noted Oct. 11.

Okla., Pauls Valley—City plans election to vote on bonds for water-works and electric-light systems and sewerage extension.

Okla., Quapaw—City election Jan. 1 to vote on $75,000 bonds for water-works and sewerage systems.

Okla., Waurika—City rejected bids building water system. Noted Oct. 18.

Water-Works (Continued)

Colo., Montrose—City plans to build 3-mi. wooden pipe line to carry water to Cimarron.

Idaho, Twin Falls — City having plans prepared by Burns & McDonald, engrs., 400 Inter-State Bldg., Kansas City, Mo., building water system, including 4,000,000 gal. filtration plant, main supply system, 83 new fire hydrants and 4-in. mains in residential districts. About $372,011. Noted Dec. 20.

Cal., San Diego — See "Streets and Roads."

Ont., Toronto—City soon lets contract installing air chambers in main water-works pumping station. About $50,000. G. G. Powell, city engr.

Ont., Windsor—Water Comrs. plan to install 2 large electric pumps in water-works plant.

B. C., Sidney—City plans to extend Victoria water system of Saanich Peninsula to include Sidney. About $25,000.

BIDS DESIRED

N. Y., Tonawanda—(Official)—Until Dec. 28, by M. W. Simson, city clk., furnishing and laying 2100 ft. 4-ft. cast iron, wood or cement intake water pipe in Niagara River to connect with Tonawanda Pumping Sta., including construction of suction well and intake pier. Noted Oct. 4.

N. J., Jersey City—(Official)—Until Feb. 5, by City laying 72 in. steel riveted pipe reinforced by concrete rings under Hackensack and Passaic Rivers, together with land connections on each side of present 72 in. pipe. A. Van Keuren, city engr.

Fla., Bonifay—Until Jan. 3, by City building water system. J. B. McCrary Co., 3rd Natl. Bank Bldg., Atlanta, Ga., engrs.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

N. Y., Brooklyn—Bd Pub. Charities, Municipal Bldg., New York City, received low bids Dec. 20, installing water system in Kings Co. Hospital, from T. O'Brien, Inc., 6311 5th Ave., $13,691; F. S Eisinger, $19,573; Chute, Thornton & Badley, Corp., 2 East 13th St., New York City, $24,500. Noted Dec. 13.

★**Tex., Port Arthur**—City let contract installing 56,000 lin.ft. cast-iron water mains to H. W. Cardwell Constr. Co. About $24,300. Noted July 5.

★**Wash., Seattle**—(Official)—City let contract building watermains in Alki Ave., to Fiorito Bros., 1630 25th Ave., $57,825. Noted Dec. 20.

Man., Winnipeg — (Official) — Greater Winnipeg Water Dist. received low bids for Contr. No. 56, building tunnel, shafts and well, at Red River crossing; Contr. No. 35, building gate house and intake at Waugh, from T. Kelly & Sons, $310,490; Tremblay-McDiarmid Co., $327,921; Winnipeg Aqueduct Constr. Co., $366,485. Noted Nov. 8.

Man., Winnipeg — (Official) — Greater Winnipeg Water Dist. received low bids building gate house and intake at Shoal Lake, from C. G. Anderson, $90,942; S. Brown, $97,702; Winnipeg Aqueduct Constr. Co., $110,337. Noted Nov. 8.

SEWERS

Proposed Work

N. J., Westmont — City plans to build sewerage system. A. Haddonfield, city engr.

Pa., Wilkes-Barre—City having plans prepared by A. Potter, engr., 50 Church St., New York City, building sewerage system and sewage disposal plant. Noted June 14.

Ga., Columbus—City plans to build sanitary sewerage system. About $350,000. S. Goody, city engr. Noted May 24.

O., Akron—See "Streets and Roads."

O., Bellefontaine — City plans to build sewer in Green and Detroit Sts. and John Ave. C. O. Innskeep, city engr.

Wis., Kenosha—City soon receives bids building trunk sewer involving 1200 ft. 36-in. rein.-con. pipe, 5935 ft. 12-36-in. tile and 45 manholes. B. Brennan, city engr.

Kan., Marquette—City had plans prepared by E. T. Archer & Co., engrs., New England Bldg., Kansas City, Mo., building sewerage system. About $20,000.

Kan., Wichita — City having plans prepared for building sanitary sewer No. 20, 5 mi. long, from northern to southern end of city. About $180,000. Northern industries will appropriate about $40,000 toward cost. P. L. Brockway, city engr. Noted Aug. 23.

Neb., Fremont—City having plans prepared by Burns & McDonnell, engrs., 402 Inter-state Bldg., Kansas City, for sewage disposal plant. About $75,000. Noted Sept. 20.

Idaho, Preston—City voted $50,000 bonds to build sewerage system. J. Johnson, clk. Noted Nov. 8.

Okla., Pauls Valley—See "Water-Works."

Okla., Quapaw—See "Water-Works."

Idaho, Rupert—Council passed ordinance to issue $82,000 bonds to build sewers in Dist. No. 1. F. Scheffel, clk.

Ont., St. Thomas—City having plans prepared for storm sewers. Bonds for $64,000 will be voted in January for project. A. Ferguson, city engr. Noted Aug. 9.

BIDS DESIRED

Minn., St. Paul—(Official)—Until Dec. 31, by H. W. Austin, purch. agt., building storm water relief sewer in Como Ave. from Langford Ave. to Knapp Pl. and from Como Ave. West to Kanapp St. O. Clausen, city engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Brockton**—City let contract for new electrical equipment for Campello sewerage pumping station, to Power Equipment Co., 131 State St., Boston, $12,750.

N. Y., Brooklyn—L. H. Pounds, boro. pres., received low bids, Dec. 19,, (a) building sewers in Ave. M from West St. to Ocean Pkway.; East 3rd St. from Ave. M to East 4th St.; East 5th St. from Ave. M to Ocean Pkway.; outlet sewers crossing West St. from Ave. M to 23rd Ave. to Bay Pkway., involving 4970 lin.ft. 6-48-in. pipe, 33 manholes, 27 sewer basins, and 34,000 ft. sheeting and bracing and 10 cu.yd. concrete.; (b) building sewer in 59th St. from 20th to 21st Ave., and outlet sewer in 21st Ave. from 59th to 60th Sts., from E. Ghilardi Contg. Co., 1217 47th St., (a) 94% (b) 99%; Tomasetti & Turicamo Contg. Co., Ave. U and East 19th St., (a) 95%; (b) 95%, C. Petracea, (a) 97%; J. J. B. La Marsh, Inc., 26 Court St., (b) 100%. Noted Dec. 13.

★**Pa., Phila.**—(Official)—City let contract building intercepting sewers along Frankford Creek, Cont. No. 17; also miscellaneous piping for grit chamber north of Lycoming St. and west of O St., Contr. No. 16L, to J. J. McHugh, 1430 South Penn Sq., $37,000. Noted Dec. 13.

★**W. Va., Wellsburg** — City let contract building lateral sewers in 3rd and 4th Wards, to B. O. Cresap, $38,679. Noted Nov. 1.

★**Ind., Frankfort** — (Official)—City let contract building storm sewer in West Washington St., including 1010 ft. 4 ft. segment block on concrete tile, 2130 ft. 12-18 in. tile to C. A. Donho & Son, Frankfort, $13,137. Noted Nov. 29.

★**Ind., Hammond**—City let contract laying sewer in Atchison Ave. from lake front railroad tracks to 121st St., to United Constr. Co., $96,000. Noted Nov. 8.

★**Mont., Glasgow** — City let contract building storm and sanitary sewers in Dist. No. 38, to Empire Constr. Co., 6 Samuelson Bldg., Minot. Noted Dec. 6.

★**Cal., Daly City**—See "Streets and Roads."

BRIDGES

Proposed Work

Fla., Bradentown — See "Streets and Roads."

Ia., Marshalltown—Marshall Co. will sell $10,000 bonds Jan. 1 to build bridges.

Cal., Oakland—Alameda Co. and Southern Pacific Ry. had plans prepared for bascule bridge over inner harbor of Oakland. W. Hood, San Francisco, ch. engr. Noted Aug. 30.

BIDS DESIRED

Mont., Hardin—Until Jan. 9, by State Highway Comn., Helena, building 100-ft. wood and steel bridge over Big Horn River in Big Horn Co.

Cal., Eureka—(Official)—Until Jan. 15 by F. M. Kay, clk., Humboldt Co., building 500-ft. span highway bridge with 75-ft truss bridge approach on each side over Eel River near Alderpoint in Rd. Dist. No 2. About $55,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. J., Jersey City** — Bd. Freeholders Hudson Co., let contract improving 14th St. viaduct (Hoboken), to Nolan & Hornung Constr. Co., 143 Summit Ave., West Hoboken. About $62,471. Noted Oct. 4.

STRUCTURAL STEEL WORK

Proposed Work

Minn., Nashwauk—See "Water-Works."

REINFORCED CONCRETE

Proposed Work

Canandaigua, N. Y.—See "Miscellaneous."

Pa., East Liberty—(Pittsburgh P. O.)—See "Industrial Works."

Wis., Milwaukee—See "Industrial Works."

Tex., Lucas—See "Industrial Works."

PRICES AND CONTRACTS AWARDED

★**Ont., Toronto**—See "Buildings."

STREETS AND ROADS

Proposed Work

Mass., Fitchburg — (Official) — Dept. Streets and Engr. rejected bids furnishing paving material. New bids. W. J. Gannon, acting comr. Noted Nov. 29.

N. J., Newark—(Official)—City plans to resurface with asphalt on 1 in. top surface over old binder, on old concrete foundation burner method to be employed, Newton St. from 14th Ave. to Cabinet St.; Lafayette St. from New Jersey Railroad Ave. to Hamburg Pl.; Niagara St. from Ferry to Berlin Sts.; repaving with asphalt on 2-in. top surface, 1½ binder, on 6-in. concrete foundation, West Kinney St. from Broad to Washington Sts.; Lyons Ave. from Clinton Pl. to Newark-Irvington line; South 10th St. from Springfield to Avon Aves.; Lincoln Ave. from Arlington Ave. to Carteret St.; Heller Pkway. from Sumner to Mt. Pleasant Aves.; also repaving Ferry St. from Lenz Ave. to Blanchard St. M. R. Sherrerd, city engr.

N. J., Passaic—City plans to issue $12,213 bonds to build and reset curbs on Van Houten Ave. C. R. Wise, city engr.

N. J., Westfield—Town Council plans to improve portion Hazel and Woodland Aves., Sinclair Pl. and East Walnut St. A. W. Vois, town engr.

Pa., Norristown—Montgomery Co. rejected bids paving Germantown Turnpike between DeKalb St. Rd. and western end of Perkiomen bridge. Noted Nov. 29.

Pa., Pittsburgh — (Official) — Council passed ordinance to grade, pave and curb Bishop St. from Antietam to Chislett Sts., cost, $10,500; Rockledge St. from Miles Way to Romanhoff St., $9000; Romanhoff St. from Rockledge to Hespen Sts., $25,500; Tokio St. from Frankstown Ave. to Calistoga St., $30,000. N. S. Sprague, city engr.

W. Va., Martinsburg—City plans to pave 307,000 yd. brick and asphalt pavement. E. D. Bromley, city engr.

Streets and Roads (Continued)

W. Va., Point Pleasant—Mason Co. sold $20,000 bonds to improve roads in Lewis Dist. Noted May 31.

N. C., Boone—Bd. Comrs. Watauga Co. plans $200,000 bond issue to build roads. R. H. Brown, secy. Noted May 24.

Ga., Barnesville — City plans to pave streets in business section. M. P. Owen, city clk.

Ga., Nashville—(Official)—City defeated $18,000 bond issue to pave streets. Noted Nov. 8.

Fla., Bradentown — (Official) — Manatee Co. sold $200,000 bonds to build roads and bridges in Palmetto-Ellenton-Terra Cela-Gillette Dist. Noted Nov. 15.

Fla., Jasper—Hamilton Co. voted $400,000 bonds to build roads, including 30 mi. brick or asphalt road from Georgia State line to Suwanee Co. line at White Springs. About $250,000. Surplus will be used to hard surface lateral roads through east district. State and Federal Government will appropriate $50,000 toward cost. Noted Nov. 29.

O., Akron—Summit Co. plans to extend North Howard Rd. from high level bridge of North Hill to Cuyahoga Co. line, 17 mi.; also completing road from Britain and East Akron to Massillon. Cost, $450,000 and $150,000 respectively.

O., Akron—(Official)—City receives bids in March paving, building sewers and sidewalks on North, Grant and Cuyahoga Sts. and Martha Ave., involving $7500 lin.ft. payment, 30 ft. wide. S. A. Zeisloft, city engr.

O., Cleveland—(Official)—City plans to grade, drain, curb and pave with brick on concrete foundation, Crestwood Ave. S. E., from Woodhill Rd., S. E. to East 10th St.; Rugby Rd., N. E. from Rodman Court N. E. to East 134th St.; Bliss Ave., N. E., from Addison Rd., N. E. to East 66th St.; open and extend West 30th St. from Roanoke Ave. S. W. to Colburn Ave., S. W.; grading Mary Ave. S. W. from West 3rd St. to Cuyahoga River. R. Hoffman, city engr.

O., Fremont—Sandusky Co. plans to pave 4 mi. Maumee Turnpike, 1 mi. west of Bellevue to east corporation line of Clyde. State and Federal Government to appropriate toward cost.

O., Port Clinton—Ottawa Co. Comrs. plan to pave 6½ mi. Rd. No. 1, concrete. Noted Aug. 23.

O., St. Bernard — (Cincinnati, P. O.)—City plans to pave several streets providing council appropriates about $60,000. H. A. Nunlist, city engr.

O., Wooster—Wayne Co. had plans prepared paving road 9.8 mi. long, 16 ft. wide between Wooster and Creston; also Lincoln Highway west of city, monolithic brick. Cost, $330,000 and $184,000 respectively.

Mich.,' Charlevoix—Charlevoix Co. plans to spend $350,000 to build Dixie Highway and main tributaries of Mackinaw Trail. Noted Oct. 11.

Mich., Muskegon—City had plans prepared paving Lake St., concrete. About $59,416. P. Grimes, city engr.

Ill., Belvidere—(Official)—Boone Co. election Jan. 9 to vote on $400,000 bonds to build roads. Noted Dec. 13.

Ill., Kankakee—City rejected bid paving East Court St. from Chicago Ave. east to city limits. New bids. About $55,500. Noted July 26.

Ill., Springfield—City plans to pave 7½ mi. of streets. Following are streets to be paved: Monroe St. from Spring to 10th Sts.; Capital Ave. from 2nd to 10th Sts.; 5th St. from Monroe to Capital Ave.; 6th St. from Monroe to Jackson Sts.; Jefferson St. from 5th to 7th Sts.; Washington St. from 4th to 10th Sts.; Adams St. from 4th to 10th Sts.; 2nd St. from Monroe to Madison Sts.; Washington St. from 2nd to 4th Sts.; Clear Lake Ave. from 19th St. to Monroe Heights addition; Jefferson St. from 10th St. to Clear Lake Ave.; Cass St. from 8th to 9th Sts.; Vine St. from Pasfield St. to Grand Blvd.; College St. from Laurel to Ash Sts.; Hough St. from 5th to 6th Sts.; Whittier Ave. from Laurel to Ash Sts.; 2nd St. from Laurel to Ash Sts.; Woodlawn Ave. from Walnut St. to Grand Blvd.; Rafter St. from 3rd to 5th Sts.; Miller St. from 7th to 13th Sts.; and Carpenter St. from 7th to 19th St. W. D. Seeley, city engr.

Ill., Toledo—Cumberland Co. voted $95,000 bonds to construct concrete road on Old Natl. Highway in addition to $231,000 appropriated by State and Federal authorities. Noted Sept. 27.

Wis., Racine—Racine Co. voted $75,388 bonds to build roads during next year. State and Federal Government to appropriate toward cost. Cost about $300,000.

Minn., Red Wing—Goodhue Co. rejected bids graveling 7 mi. Red Wing-Meisvile Highway, from Dakota Co. line to Welch Twp. New bids in spring. Noted Nov. 15.

Minn., St. Paul—City plans to pave Portland Ave. About $53,642. H. W. Austin, purch. agt., O. Claussen, city engr.

Minn., Winona — City plans to pave about 15 blocks. J. H. Protz, mayor.

Kan., Lawrence—Douglas Co., Lawrence and Shawnee Co., Topeka, lets contract about Mar. 1, building cement road from Ft. Leavenworth to Ft. Riley, 27 mi. long, 18 ft. wide. Noted Oct. 25.

Kan., Norton—City plans to pave streets in business section. J. Jackey, supt. streets.

Mo., Malden—City plans to pave about 14 blocks. S. L. Downing and P. Bartmess, purch. agts.

Mo., St. Joseph—Council passed ordinance to pave 31st St. from Jules to Sylvanie Sts.; asphaltic concrete, grading 4th St. from Hyde Park Ave. to Prindle St.; 20th St. from Walnut St. to Commercial Sts.; 15th and 16th Sts. from Jules to Faraon Sts.; Logan St. from St. Joseph Ave. to 9th St. C. P. Hoff, city engr.

Arkansas — (Official) — State Highway Dept., Little Rock, will receive bids about Mar. 1, building 20 mi. macadam road, 14 ft. wide in Carroll Co. from Eureka Springs through Green Forest and Alpena to Green Co. line. About $158,000. W. Hight, asst. highway engr. Noted Dec. 13.

Tex., Franklin—Robertson Co. plans election to vote on $75,000 bonds to build roads.

Tex., Gonzales—(Official)—Gonzales Co. voted $75,000 bonds to build and improve highways. Address W. B. Brookes, Waelder. Noted Dec. 6.

Tex., Hillsboro—(Official)—Hill Co. plans election soon to vote on bonds for 3 concrete highways through county. About $1,250,000. R. T. Bierns, co. judge.

Tex., La Grange—(Official)—Fayette Co. election Jan. 15 to vote on $100,000 bond issue to build roads in Distr. No. 1. Address J. C. Baumgarten, Schulenburg.

Tex., Montague — (Official) — Montague Co. defeated $300,000 bonds to build roads. Noted Dec. 6.

Tex., Palestine—Anderson Co., Elkhart Dist., voted $40,000 bonds to improve roads.

Tex., Roby—Fisher Co. defeated $250,000 bonds to build roads. Noted Nov. 29.

Tex., Texarkana—City plans to pave 3 blocks with brick. W. Haynes, city engr.

Idaho, Council—Adams Co. voted $80,000 bonds to build State Highways and $20,000 bonds for other road improvements.

Ariz., Nogales—Santa Cruz Co. election Jan. 23, to vote on $175,000 bonds to build roads.

Wash., Garfield — (Official) — City sold $20,000 bonds to build streets and sidewalks. Noted Dec. 13.

Wash., North Yakima—Yakima Co. plans to spend $80,000 to build roads during 1918. State will appropriate toward cost.

Wash., Tacoma—Pierce Co. soon lets contract building 1½ mi. road connecting West Pioneer Ave. at Puyallup city limits to present Hill Rd. About $27,000. J. R. O'Farrell, comr.

Wash., Waterville —(Official)— Douglas Co. receives bids about Mar. 18, building Permanent Highway No. 4A, 1½ mi. long involving grading, draining and surfacing with crushed rock. About $10,194. R. Foster, co. engr. Noted Nov. 29.

Wash., Wenatchee—Chelan Co. plans to build 16 mi. road known as Blewett Pass Rd., 16 ft. wide.

Cal., Fresno—Bd. Supervs. Fresno Co. plan election to vote on $500,000 bonds, of which $425,842 will be used to build highway from Hanford to San Lucas through Coalinga. Surplus will be used in improving other county roads. D. M. Bernwell, co clk.

Cal., San Diego — City Council passed resolution to improve Jackdaw, Hunter, Hawk and Arcadia Sts., including cement pavement with asphalt surface, cement curbs, sidewalks and gutters, metal culverts, watermains, etc. G. Cromwell, city engr.

N. S., Stellarton—Street Com. plans to spend $50,000 to build streets and sidewalks. J. T. McLellan, chn.

BIDS DESIRED

Fla., Quincy — Until Jan. 8, by J. P. Smith, city clk., building 23,000 sq.yd. sheet asphalt, concrete or brick pavements. J. B. McCrary Co., 3rd National Bank Bldg., Atlanta, Ga., engrs. Noted Nov. 22.

Louisiana — Until Jan. 7, by State Bd. Engrs., New Orleans, building 1.69 mi. New Orleans-Pydras Highway, gravel. D. Buie, state highway engr.

Michigan—(Official) — Until Jan. 3, by State Highway Comn., Lansing, building 14.1 mi. stone and gravel road, including grading, surfacing and culverts in Osceola Co. Noted Dec. 13.

Mich., Lansing—(Official)—Until Jan. 21, by City, for asphaltic cement for year 1918. J. A. Parsons, clk. Advertised in this issue.

O., Portsmouth—(Official)—Until Jan. 7, by Scioto Co. Comrs., building 3510 ft. road, 16 ft. wide, involving 1 acre guttering, 1889.8 cu.yd. excav., 2453.9 cu.yd. embankment, 20.4 cu.yd. masonry and 56 ft. 15-30-in. culvert pipe. J. J. Harper, engr.

Okla., Sapulpa—(Official)—Until Jan. 9, by R. E. Jenness, city clk., paving, curbing, guttering, draining, grading and installing sewer pipes in Mission St. and Lincoln Ave. About $40,000. R. M. Whittelsey, city engr. Noted Dec. 13.

California—(Official)—Until Jan. 7, by State Highway Comn., 515 Forem Bldg., Sacramento, grading 3.7 mi. road in San Diego Co. 3 mi. east of Willows and Sweetwater River, involving 55,250 cu.yd. excav. without classification, 135 cu.yd. Class "A" portland cement concrete (culverts and monuments); 160 cu.yd. dry rubble masonry (retaining wall). G. R. Winslow, highway engr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★W. Va., Charleston—Kanawha Co. let contract improving section Giles, Fayette and Kanwha Turnpikes, including 1726 cu.yd. concrete, 16,400 lb. reinforcement; 744 ft. 12-in. and 162 18-in. culvert pipe, to Central Eng. Co., Lee and Dickson Sts. Noted Nov. 8.

★Ala., Geneva—(Official) — Geneva Co. let contract building portion Samson & Opp Rd., part of State Trunk No. 12, to Crawley & Co., Banks, $17,757. Noted Nov. 29.

★Tenn., Greenville—Greene Co. let contract grading about 175 mi. earth road and macadamizing 147 mi., to Mann Constr. Co., at following unit prices; earth, 28c. per cu.yd.; loose rock, 40c. cu.yd.; solid rock, 89c. cu.yd.; macadam, $1.82 cu.yd.; concrete, $11 cu.yd.; paving, $2 cu.yd.; riprap, $2 cu.yd.; lumber, $40 per M. About $510,000. Noted Aug. 30.

★O., Newark—(Official)—Licking Co. let contract grading and improving Sects. 25 and 26 of Jersey Summit Rd., 2.22 mi. long, 16 ft. wide, involving 15,847 cu.yd. grading and 20,765 sq.yd. macadam, to Purdum & Schwartz, Shepard, $31,576.

★Ind., Anderson—Madison Co. Comrs. let contract paving Meridian Ave., stanolind asphalt, to Indiana Asphalt Paving Co., 25th St. and Lake Erie & Western Ry., Indianapolis, $61,000. Noted Dec. 20.

Ind., Elkhart—City received low bids paving Franklin and Michigan Sts., from Northern Constr. Co., Elkhart, and Williston Constr. Co., South Bend. About $40,000 available for work. Noted Dec. 20.

Streets and Roads (Continued)

Ind., Indianapolis—City received low bids resurfacing South St. from Virginia to Capitol Aves., (a) first grade wooden block, (b) second grade block, (c) granite block, from Public Constr. Co., (a) $6.83; Union Asphalt Constr. Co., 308 American Central Life Bldg., (a) $7.65; J. E. McNamara Constr. Co., (b) $4.90; A. D. Bowen, (b) $5.39; Union Stone & Material Co., 1007 Gilbert Ave., Cincinnati, O., (b) $6; (c) $7.72; S. M. Timberlake Constr. Co., 236 American Life Bldg., (a) $6.81. Noted Aug. 23.

★Mich., Wyandotte — City let contract paving Spruce, Cedar, Cherry, Orchard, Forest and Plum Sts., to J. H. Baker Co., 1454 Penobscot Bldg., Detroit, $130,000. Noted Nov. 8.

★Neb., Columbus—(Official) — City let contract for 29.528 sq.yd. bitulithic pavement, to W. Horribeu, 1422 Walnut St., Iowa. City, Ia., $2.35 per sq.yd. Noted Dec. 20.

★Mo., Jefferson City — (Official)—Cole Co. let contract improving portions of Henley and Marys Home Rd., Hough Park Dr., Osage Bend and Williams Ferry Rds., Russellville-Centertown Rd., Boonville and Decatur Rds., and roads in Rd. Dist. No. 9, to Pope Constr. Co. and L. Brunner, both of Jefferson City, $17,563. Noted Nov. 26.

★Utah—(Official)—State Highway Comn., Salt Lake City, had plans prepared rebuilding 15 mi. highway through Juab and Millard Cos. and highway bridge over Sevier River. About $11,500. Work to be done by day labor. Noted Dec. 13.

★Ariz., Yuma—City let contract improving 1st, 2nd, 3rd and Court Sts., including grading, curbing, culverts, sidewalks, guttering and building 6789 lin.ft. 1½ in. bitulithic pavement on 4 in. bituminous base, to O & C Constr. Co., Yuma. About $58,077.

Washington — State Highway Comn., Olympia, received lowest bid moving 1800 ft. North Bank track of Southern Pacific R.R. system around bluff between Collins and Cooks to open up State Rd. No. 8, Skamania Co., from Porter Bros., Ry. Ex. Bldg., Portland, Ore., $18,673. Noted Nov. 29.

★Washington — State Highway Comn., Olympia, let contract building 5¼ mi. Pacific Highway between Woodland and Martins Bluff in Cowling Co., to L. H. Goerig, Seattle. About $80,007. Noted Nov. 20.

Oregon — State Highway Comn., 1301 Yeon Bldg., Portland, received low bids grading portion Pacific Highway in Clackamas Co. between Canemah and New Era, from Clackamas Co. Court, $34.765; Warren Constr., Journal Bldg., Portland, $48,577; United Contract Co., North Western Bank Bldg., Portland, $49,732.

Cal., Calexico — City received bids improving several streets from G. R. Daley, McNeece Bldg., San Diego, $174,322; Federal Constr. Co., Sharon Bldg., San Francisco, $186,427; Bryant & Austin, 1650 Compton Ave., Los Angeles, $188,855. Noted Dec. 6.

★Cal., Daly City—City let contract grading and building asphaltic concrete pavement, concrete sidewalks and gutters and installing vitr. pipe sewers on several streets, to H. Crummey Co., Inc., Hearst Bldg., San Francisco. About $19,820.

★Cal., San Diego—City let contract laying 77,706 sq.ft. asphalt pavement, concrete base, cement sidewalks, curbs, etc. in National Ave., from 13th to 16th Sts., to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles. About $14,614. Noted Dec. 20.

★Cal., San Francisco—(Official)—State Bd. Harbor Comrs., Sacramento, let contract paving embarcadero with bituminous concrete and basalt blocks to P. J. McHugh, 3rd and North Mercer Sts., Seattle, Wash., $14,974. Noted Dec. 20.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

Pennsylvania—Lykens Valley Ry. plans to rebuild 2½ mi. of track and build extension from Tower City to Reiner City. J. Oenslager, Jr., 711 North 3rd St., Williamstown, secy.

Georgia—Columbus R.R. plans to rebuild about 2 mi. of track. Stone & Webster, 147 Milk St., Boston, genl. mgrs.

Florida — Miami Traction Co., Miami, plans to build 4 mi. line between Miami and Miami Beach. J. R. Tatum, 212 12th St., secy.

Alabama—Stouts Mountain & Hanceville R.R. plans to build 6 mi. line between Hanceville and Stouts Mountain. C. F. Wheelock, Amer. Trust Bldg., Birmingham, interested.

Louisiana—New Orleans Ry. & Light Co., New Orleans, plans to rebuild 5.7 mi. of track. M. S. Doan, 201 Baronne St., genl. mgr.

Kentucky—South Covington & Cincinnati Street Ry., Covington, plans to rebuild 2.4 mi. of track. W. W. Tripp, ch. engr.

Ohio—Cincinnati Traction Co. plans to rebuild 8 mi. of track and build 2.44 mi. new track. A. Benhan, Traction Bldg., Cincinnati, genl. mgr.

Ohio—Portsmouth Street R.R. & Light Co. plans to build 2 mi. line between Portsmouth and Union Mills. R. D. York, Portsmouth, genl. mgr.

Indiana — Terre Haute, Indianapolis & Eastern Ry. plans to rebuild 4 mi. of track. T. R. H. Daniels, Terminal Bldg., Indianapolis, ch. engr.

Illinois—Chicago & Interurban Traction Co., 914 Borland Bldg., Chicago, plans to rebuild 4 mi. of track. W. Crawford, secy.

Iowa—Sioux City Serv. Co. plans to rebuild 2½ mi. of track. M. W. Lake, Sioux City, ch. engr.

Texas—Bryan & Central Tex. Interurban Ry. plans to build 4 mi. line between Newsome and Wilcox. L. M. Levinson, Bryan, ch. engr.

Colorado—Colorado Springs & Interurban Ry., Colorado, plans to rebuild 4 mi. of track and build 1 mi. new track. W. Lloyd, 520 South Tejon St., secy.

California—United R.R. of San Francisco plans to rebuild about 5 mi. of track. W. Von Phul, genl. mgr.

Ontario—Ottawa Electric Ry. plans to rebuild 2 mi. of track. W. H. Baldwin, Middle St., Ottawa, ch. engr.

EXCAVATION AND DREDGING

Proposed Work

Minn., Granite Falls — Ditch — Yellow Medicine Co. receives bids in February building Judicial Ditches Nos. 8, 9 and 11. About $34,000. G. Wilson, co. aud. A. Youngdale, engr., prepared plans.

Mo., Harrisonville—Drainage—S. K. Hall, secy., Grand River D.D. of Cass and Bates Cos., rejected bids building 24 mi. open ditch, involving 2,800,000 cu.yd. excav., 10 lateral ditches involving 272,000 cu.yd. excav. G. Bird, Harrisonville, engr. New bids. Noted Oct. 25.

BIDS DESIRED

Miss., Phila.—(Official)—Drainage—Until Jan. 11, by A. D. Sharp, chn. Drainage Comn., of Kentawka D.D., Neshoba Co., building certain canals; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Minn., Buffalo — (Official) — Ditch — Wright Co. let contract building Co. Ditch No. 33, to Natl. Clay Wks., Mason City, Ia., $24,270. Noted Dec. 6.

★Cal., El Centro—(Official)—Irrigation—Imperial Irrigation Dist. let contract raising Saiz Levee involving 240,000 cu.yd. excav. mostly by teams and scrapers, to L. Little, 27½c. per cu.yd. plus Mexican duties; Volcano Levee, involving 555,000 cu. yd. excav. by train and steam shovel, to R. Sherer & Co., Pacific Electric Bldg., Los Angeles, 48c. per cu.yd. plus Mexican duties. Noted Nov. 29.

INDUSTRIAL WORKS

Proposed Work

Mass., Everett — General Electric Co., River Rd., Schenectady, N. Y., plans to build 1-story foundry here. About $35,000.

N. Y., Brooklyn—Eastern Flexible Conduit Co., has increased its capital stock from $50,000 to $150,000 and plans addition.

N. Y., Brooklyn—L. Leavitt, 454 Driggs Ave., had plans prepared, 3-story, 100 x 125-ft. varnish factory. About $70,000.

N. Y., Brooklyn—N. Schwarstein, Manhattan Beach, having plans prepared by W. T. McCarthy, archt., 16 Court St., for 1-story, 120 x 164-ft. brick garage, West End Ave. About $50,000.

N. Y., Brooklyn—J. Sklar, 661 Willoughby Ave. had plans prepared by H. J. Nurick, archt., 892 Bway., for 1-story, 100 x 127-ft. garage. About $30,000.

N. Y., New York—J. Chatillon & Sons, 85 Cliff St., has increased its capital stock from $200,000 to $300,000 and plans addition.

N. Y., New York—Ess Eff Realty Co., had plans prepared by J. A. Hamilton, archt., 32 Bway., for 3-story garage. S. L. Frank, pres.

N. Y., New York—M. M. Ostrander, c/o H. L. Morris, 32 Liberty St., had plans prepared, for 2-story, 59 x 100-ft. brick garage on Alexander Ave. About $25,000.

N. J., Perth Amboy—American Smelting & Refining Co. having plans prepared by Goldberger & Griesen, archts., Raritan Bldg., for 2-story, 50 x 150-ft. addition About $80,000. Noted May 3.

Pa., Chester—Lodge and Store—Knights of Columbus, c/o W. K. Mulford Co., 428 South 13th St., Phila., having plans prepared by C. W. Brazier, archt., Crozier Bldg., for 3-story. About $50,000.

Pa., East Liberty—(Pittsburgh P. O.)—Pennsylvania R.R. soon lets contract, 4-story, 418 x 506-ft. rein.-con. freight warehouse and 50 x 50-ft. office, Lambert St. A. C. Shand, Broad St. Sta., Phila., ch. engr.

Pa., North East—Blane-Mackay-Lee Co. plans to rebuild lumber mill recently destroyed by fire. About $100,000.

Pa., Pittsburgh — Happerbstall Forge & Knife Co., 47th and Hatfield St., plans 1-story, 130 x 108-ft. concrete and steel addition. About $40,000.

Pa., Pittsburgh—Thompson & Co. plans to rebuild storage house recently destroyed by fire. About $50,000.

Pa., Reading—Berks Eng. Co., 7th and Chestnut Sts., increased its capital stock from $25,000 to $150,000 and plans addition to machine shop.

Pa., Sharon—Standard Car Constr. Co., Columbia Bank Bldg., Pittsburgh, increased its capital stock from $1,000,000 to $2,000,000 and plans additions and improvements.

Md., Curtis Bay—Mann Shipbuilding Co. having plans prepared for addition. About $100,000. Address W. B. Mann, Ft. Light St., Baltimore.

Va., Alexandria—Amer. Shipbuilding Co., 1249 Kenyon St., N.W., Wash., D. C., purchased 30-acre site on Potomac River here and plans to build plant.

Va., Norfolk—Seaboard Ice & Cold Storage Co. plans 7-story factory, Division St. L. Feuerstin, pres.

Va., St. Paul — Clinch Valley Chemical Extract Co. recently incorporated with $5,000,000 capital stock, plans to build by-product factory.

W. Va., Huntington — Huntington Steel Products Co. plans to build large addition.

N. C., Asheville—H. B. Posey and associates plan to organize company with $100,000 capital stock and build cotton mill.

N. C., Marion—Crown Cotton Mills Co. will increase its capital stock from $50,000 to $150,000 and build addition.

Ala., Anniston — Louisville & Nashville R.R. plans to rebuild roundhouse recently destroyed by fire. Loss, $30,000. W. H. Courtenay, Louisville, ch. engr.

Tenn., Jackson—Southern Engine & Boiler Mfg. Co. increased its capital stock from $500,000 to $800,000 and plans additions.

Tenn., Nashville—Nashville, Chattanooga & St. Louis Ry. plans to build automatic coaling station. H. McDonald, Nashville, ch. engr.

Ky., Louisville—Louisville Planing Mill Co., Beach St., plans to rebuild sawmill, planing-mill and veneer plant recently destroyed by fire. About $60,000.

O., Bellefontaine—Cleveland, Cincinnati, Chicago & St. Louis R.R. plans extensive additions and improvements to repair shop here. C. A. Paquette, Cincinnati, ch. engr.

O., Canton—Buckeye Cereal Co. increased its capital stock from $100,000 to $300,000 and plans additions. E. M. Stultz, mgr.

Industrial Works (Continued)

O., Cleveland—(Official)—J. Heller, 2326 Lorain Ave., having plans revised by W. Markowitz, archt., 403 United Bank Bldg., for 3-story factory and store. $35,000. Noted Dec. 13.

O., Cleveland—Monarch Brass Co., East 45th and Payne Ave. soon lets contract for brick factory. About $50,000. Swartzenberg & Gaede, 1900 Euclid Ave., archts.

O., Cleveland—F. J. Vichek, E. A. Neckas and others organized company with $900,000 capital stock and plans to build 3-story factory, Quincy Ave. and Woodhill Rd.

O., Lima—Lima Rivet & Forgings Co., recently incorporated with $300,000 capital stock, plans new plant between Robb and O'Connor Aves., facing Jackson St. on Baltimore & Ohio right-of-way. About $30,000.

O., Sandusky—American Crayon Co. plans to build factory on 50-acre site.

Ind., Ft. Wayne — Haffner Baking Co. soon lets contract for 3-story, 45 x 90-ft. bakery. About $40,000. C. D. Cooley Co., Century Bldg., Pittsburgh, archts.

Ind., Hamilton—Standard Steel Co. plans factory. About $250,000.

Ind., Indianapolis—See "Buildings."

Ind., Peru—Model Gas Engine Co. plans addition. About $50,000.

Ind., Vincennes—Baltimore & Ohio R.R. plans freight depot, 1st and Scott Sts. About $100,000. H. A. Lane, Baltimore, Md., ch. engr.

Mich., Bay City—Industrial Works plans addition to foundry and 24 x 100-ft. canopy shop. About $50,000.

Mich., Traverse City — Boardman River Electric Light & Power Co. plans power plant and dam. About $200,000. Fargo Eng. Co., Jackson, engrs.

Ill., Chicago—H. G. Seal Co., 4410 Ravenswood Ave. represented by Roseberg & Reninger, 111 West Washington St., having plans prepared by W. T. Branitzky, archt., 54 West Randolph St., for 100 x 100-ft. factory, Ravenswood Ave. About $100,000.

Ill., Chicago—Stanley Motors Car Co., 2101 Indiana Ave., having plans prepared by Holabird & Roche, archts., 104 South Michigan Ave., for 3-story, 50 x 181-ft. garage and service station. About $55,000. F. Jay, mgr.

Ill., Edwardsville—Liberty Steel Co. recently incorporated with $1,000,000 capital stock, plans to build factory. S. F. Lloyd, pres.

Wis., Eau Claire — Northwestern Motor Co. plans to build new plant. About $75,000. K. Rosholt, pres.

Wis., Milwaukee—Milwaukee Paper Box Co., 400 Florida St., had plans prepared by Schetzky & Son, archts., for 5-story, 100 x 150-ft., South Pierce St. and Muskego Ave. About $150,000. W. C. Carlson, pres.

Wis., Milwaukee — Schlitz Brewing Co., 3rd and Galena St., plans 2-story, rein.-con. bottle warehouse, Walnut and 2nd Sts. About $40,000.

Wis., Milwaukee — M. Tullgren & Sons, archts., Majestic Bldg., soon lets contract, 2-story, 50 x 62 ft. rein.-con. and brick factory, 121 14th St., for Standard Ice Cream Co.

Wis., New Holstein—J. Lauson Mfg. Co. increased its capital stock from $500,000 to $1,000,000 and plans addition.

Wis., West Allis—(Milwaukee P. O.)—A. G. Schulz Co., 417 Clybourn St., Milwaukee, purchased 9-acre site here and plans to build new plant. About $350,000.

N. D., Valley City—E. G. Pegg having plans prepared by R. B. Stacy-Judd, archt., Minot, for 1-story, 75 x 130-ft. rein.-con. garage. About $25,000.

Mo., St. Louis—Laclede Gas Light Co., 11th and Olive Sts., purchased 200 x 756-ft. site and plans to build storehouse, meter repair-shop and garage. About $400,000.

Tex., Lucas—Gulf Pipe Line Co., Beaumont, plans to build 1-story, 36 x 40-ft. concrete and galvanized iron oil-burning plant to replace steam station. About $61,637.

Okla., Blackwell—Blackwell Mill & Elevator Co. plans to rebuild elevator recently destroyed by fire. About $100,000.

Okla., Miami—Maxine Mining Co. recently incorporated with $250,000 capital stock, plans to build 500-ton mill. F. Snoemaker, pres.

Wash., Everett—Norway Pacific Constr. and Dry Dock Co., Seattle, plans to build shipbuilding plant here. About $1,500,000. M. G. Thomas, pres.

Ore., Portland—G. M. Standifer Constr. Co., Northwest Block Bldg., plans shipbuilding plant on Columbia River. About $750,000. G. M. Standifer, pres.

Cal., Fresno—Valley Ice Co. plans 1-story, 60 x 150-ft. rein.-con. addition. About $75,000.

Cal., Hanford—California Peach Growers, Inc., plans to build plant here. About $25,000. J. F. Niswander, vice pres. and genl. mgr.

Cal., Los Angeles—City plans to build power plant No. 2. About $750,000. Andrew C. Hansen, city engr.

Cal., San Bernardino — Pacific Electric Ry. soon lets contract, 100 x 190-ft. concrete and brick repair shop and car barn. M. C. Halsey, 695 Pacific Electric Bldg., archt.

Cal., Visalia—F. H. Whipple plans garage, Main and Bridge Sts. About $30,000.

N. B., St. John—Imperial Oil Co., Ltd., 7 Nelson St., had plans prepared for warehouse. About $50,000.

Que., Maisonneuve — Canadian Machine Co. plans to build factory here. About $250,000.

B. C., Vencouver—Schaake Eng. Co. plans to build first unit of large machine shop. About $46,750.

BIDS DESIRED

N. Y., Chenango Bridge—See "Buildings."

Cal., Palmdale—(Official)—Until Jan. 7, by Bd. Supervs. Los Angeles Co., Los Angeles, building maintenance warehouse here. H. J. Lelande, clk.

PRICES AND CONTRACTS AWARDED

★**Conn., Waterbury**—International Silver Co. let contract 1-story, 45 x 79-ft. power house and tunnel, to L. A. Miller, 21 Church St., Meriden, $25,000.

★**Pa., Pittsburgh**—Miller-Owen Electric Co. let contract 1-story, 40 x 200-ft. warehouse, to H. S. Kesuler, 3301 Penn Ave., $40,000. Noted Nov. 29.

★**Pa., Steelton**—John Hoffer Flouring Mill Co. let contract 5-story, 50 x 70-ft. brick mill, to F. E. Hollenback, 1804 Brandywine St., Phila., $50,000. Noted Dec. 6.

★**Wash., D. C.** — Piedmont Mount Airy, Guano Co., Keyser Bldg., Baltimore, let contract for fertilizer building here, to C. L. Stockhausen Co., Inc., Marine Bank Bldg., Baltimore, $60,000.

★**O., Columbus**—Blue Valley Creamery Co., 196-206 South Lazelle St., let contract 3-story, 36 x 150-ft. factory, to E. H. Latham, Columbus Savings and Trust Bldg., $100,000. Noted Dec. 6.

★**O., Dayton**—Wright Aeroplane Co. let contract 1-story, 300 x 1000-ft. addition, to F. H. Smith, Inc., 120 Bway., New York City, $100,000.

★**O., Hamilton**—(Official) — Liberty Machine Tool Co. let contract, 1-story, 100 x 200 ft. brick and rein.-con. machine shop, to F. K. Vaughn Bldg. Co., 204 Rentschler Bldg., $40,000.

★**O., Xenia**—Hooven Allison Co. let contract for 2 additions, to Blanchard Bldg. Co., Dayton, $100,000.

★**Mich., Battle Creek**—Armour Grain Co., 208 South La Salle St., Chicago, let contract 5-story, 85 x 120-ft. factory, to Witherspoon Englar Co., 53 West Jackson Blvd., Chicago. About $500,000. Nov. 15.

★**Mich., Detroit**—Simmons Bed Co., Kenosha, Wis., let contract 1-story, 120 x 150-ft. warehouse, to F. J. Whitney, 1443 Grand River Ave., $30,000.

★**Ill., Chicago**—Hotel La Salle Co., La Salle and Madison Sts., let contract for warehouse and garage, to G. A. Fuller Co., 140 South Dearborn St.

★**Ill., Chicago**—Natl. Beverage Co., 1900 West 18th St., let contract for 1- and 2-story, 70 x 75-ft. alteration to storage building, to Scown Bldg. Constr. Co., 36 West Randolph St., $35,000.

★**Minn., Minneapolis**—Minneapolis Industries Assn., 1232 1st Natl. Soo Line Bldg., let contract 3-story, 80 x 500-ft. warehouse, to Splady Albee & Smith, 1022 Plymouth Bldg., $100,000.

★**Minn., Minneapolis**—See "Buildings."

★**Neb., Omaha**—A. Murphy & Sons, 14th and Jackson Sts., let contract, 3-story, 66 x 132-ft. factory, to G. Parsons, 616 Keeline Bldg., $40,000.

★**Mo., St. Louis**—Wagner Electric Co., 6400 Plymouth Ave., let contract 1-story, 130 x 512-ft ammunition plant, to W. M. Sutherland Bldg. & Contr. Co., Syndicate Trust Bldg., $60,000.

★**Cal., Hanford**—F. N. Isaac let contract, 1-story, 125 x 150-ft. garage, Irwin and 8th Sts., to Trewhitt & Shields, Fresno, $25,000.

★**Ont., Toronto**—Canadian Aeroplane Co., Dufferin St., let contract addition, to Jackson Lewis Co., Ltd., Bell Telephone Bldg., $30,000.

BUILDINGS

Proposed Work

Mass., Wellesley—Church and Parish House — Congregational Church Society having plans prepared by Carrere & Hastings, archts., 52 Vanderbilt Ave., for 1½-story, 75 x 120-ft. About $100,000. C. N. Taylor, chmn. bldg. comn.

Conn., Waterbury — Hospital — Waterbury Hospital had plans prepared by H. Bacon, archt., 1001 Park Ave., New York, building addition. J. S. Eaton, res.

Conn., Waterbury — Hotel — Connecticut Owning Co. having plans prepared by G. Keister, archt., 56 West 45th St., New York City, for 10-story, brick and steel. M. E. Keeley, pres.

Pa., East Liberty—(Pittsburgh P. O.)—(Office)—See "Industrial Works."

Pa., Phila.—Library—Phila. Free Library having plans prepared by P. H. Johnson, archt., 51st and Chester Sts. About $50,000.

Pa., Pittsburgh—Nurses' Home—St. Margaret's Memorial Hospital, 265 46th St., soon lets contract, 4-story, 35 x 115-ft. addition. E. J. Edsall, supt. F. E. Billquist, Vandergrift Bldg., archt. Noted Oct. 18.

Pa., Titusville—Bank—Titusville Trust & Safe Deposit Co., having plans prepared by A. C. Bossom, archt., 466 5th Ave., New York City. Cost between $75,000 and $140,000. Address J. C. McKinney, Southern Penn. Oil Co., Commercial Bank Bldg.

Del., Milford—Armory—State soon receives bids for 2-story, brick and stone. L. W. Crawford, Equitable Life Bldg., Wilmington, archt.

Wash., D. C. — College — Notre Dame School for Girls, North Capitol and K Sts., having plans prepared by F. G. Pierson, archt., Washington Loan & Trust Bldg., for 2-story. About $100,000.

Wash., D. C.—Theater — T. Moore, c/o Garden Theater, 432 9th St., N. W., plans to build 4 theaters; 3 will cost $200,000 and 1 $350,000. Blanke & Zink, archts., Equitable Bldg., Baltimore, will receive bids about Jan. 1.

Va., Rosslyn—Exchange—Chesapeake & Potomac Telephone Co., 5 Light St., Baltimore, Md., had plans prepared by McKenzie, Voorhees & Gmelin, archts., 1123 Bway., New York City, for 1-story, brick to be erected here.

W. V., Keyser — Administration — State Bd. Control, 405 Capitol St., Charleston, receives bids about Feb. 1, 3-story. About $60,000. J. S. Lakin, pres. P. A. Davis, 1713 Sansom St., Phila., archt.

W. Va., Moundsville — High and Grade School—Bd. Educ. had plans prepared by C. W. Bates, archt., Natl. Bank Bldg., Wheeling. About $90,000.

N. C., Kingston — School—City election Jan. 1, to vote on $150,000 bonds to build school.

Ga., Lyons — Courthouse — Toombs Co. had plans prepared by A. Blair, archt., Macon, rebuilding courthouse recently destroyed by fire. About $50,000.

Buildings (Continued)

Fla., Miami—Hotel—Casa Grande Hotel Co. had plans prepared by Howell & Thomas, archts., 2023 Euclid Ave., Cleveland. About $500,000. Address G. H. Burrows, 526 Guardian Bldg., Cleveland.

Miss., Corinth—Court House—Alcorn Co. having plans prepared by N. W. Overstreet, archt., for brick and stone. About $100,000.

Miss., Poplarville—Courthouse — Pearl River Co. having plans prepared by P. J. Krouse, archt., Miazzo-Woods Bldg., Meridian. About $50,000.

Ky., Bowling Green—Hospital—City and Warren Co. plan. About $50,000.

O., Canton—School—Bd. Educ. will sell $190,000 bonds for school in Southwest section.

O., Cincinnati—Banquet Hall and Auditorium—City having plans prepared by Elmer & Anderson, archts., Citizens Bldg., for 2-story, 78 x 115-ft. and 45 x 125-ft. About $125,000.

O., Cleveland—(Official) — Office A. M. Allen Co., archts., 301-1900 Euclid Bldg., preparing plans for 2-story office building. About $325,000. Owner's name withheld.

O., Cleveland — Office — Physicians and Surgeons Exchange Co., 10310 Churchill St. having plans prepared by Allen & Osborne Co., archts., 700 Rose Bldg., for 16-story, Chester Ave. and East 13th St. About $1,000,000.

O., Cleveland—Store — See "Industrial Works."

O., Columbus—Courthouse—Franklin Co. having plans prepared by D. A. Riebel, archt., for 4- or 5-story addition. Cost between $111,000 and $137,000.

O., Columbus—Hospital—McKinley Hospital soon lets contract, 6-story, 45 x 93, and 45 x 100-ft. About $75,000. Stribling & Lum, 540 Denig Ferson Bldg., archts. Noted July 19.

O., East Liverpool—School — Bd. Educ. having plans prepared by C. M. Metsen, archt., 1st Natl. Bank Bldg., for 55 x 70-ft., on Pleasant Heights. About $50,000.

O., Painesville—School—St. Mary's congregation soon lets contract for 1- and 2-story, 90 x 168 ft. About $50,000. C. R. Greco, 729 Guardian Bldg., Boston, Mass., archt.

O., Toledo—Clubhouse — Sylvania Golf Club plans. About $50,000. H. W. Wachter, trustee.

O., West Liberty—(Official)—School—Bd. Educ. Logan Co., receives bids about Jan. 1, for 2-story, 55 x 101-ft. brick and rein.-con. in Monroe Twp. About $45,000. E. H. Walkins, Jr., pres. E. H. Rickett, 274 East 12th Ave., Columbus, archt.

O., Wooster—Bank and Office—Peoples Savings & Loan Co., c/o Henry & Murphy, archts., 523 2nd Natl. Bank Bldg., Akron, having plans prepared, 5-story, 48 x 58 ft. About $70,000.

O., Zanesville—Y. M. C. A. having plans prepared by C. D. McLane, archt., 301 Robinson Bldg., Rock Island, Ill., and A. A. Hanson, assoc. archt., 313-320 Peoples' Bank Bldg., Zanesville. About $200,000.

Ind., Gary—Hotel—Atlas Bldg. and Investment Co., 670 Washington Ave. soon lets contract for 3-story, 150 x 150-ft. About $120,000. P. F. Olson, 127 North Dearborn St., Chicago, archt.

Ind., Indianapolis—Medical School, etc.—Indiana University, 102 North State St., having plans prepared by B. F. Daggett, archt., 956 Lemcke Annex Bldg., for medical school power house and laundry buildings. F. F. Rose, Muncie, chmn. bd. trustees.

Ind., Rockport — Court House—Spencer Co. having plans prepared by E. E. Dunlap, archt., 909 State Life Bldg., Indianapolis. About $125,000. A. B. Branch, co. aud.

Mich., Detroit—Hospital — Bd. Health, 233 St. Antoine St., having plans prepared by W. B. Stratton and D. J. Schneider, archts., 117 Union Trust Bldg. About $1,000,000. J. F. McKinley, secy.

Mich., Jackson—Hotel — General Hotels Co. having plans prepared by Essenwein & Johnson, archts., 781 Ellicott Sq., Buffalo, N. Y. About $500,000. A. Essenwein, dir.

Ill., Centralia—Hospital — United Mine Workers' Union of America plans. About $50,000.

Ill., Chicago — Church and Colleges — Lombard Theological College, Galesburg, plans 4 buildings, 60th St. and Dorchester Ave. here. About $250,000.

Ill., Chicago—Church—English Lutheran congregation, 2122 Sunnyside Ave., having plans prepared by E. E. Roberts, archt., 82 West Washington St. About $50,000. S. S. Kauffman, rector.

Ill., Chicago—Hotel, Store and Theater—Amalgamated Theater Corp., 6 South Wabash Ave., having plans prepared by C. W. & G. L. Rapp, archts., 60 West Washington St., for 5-story. About $750,000. B. Bolahan, pres.

Ill., Sullivan — Home — Masonic Grand Lodge of Illinois plans 3-story, brick and rein.-con. addition to Old Folks Home. About $60,000. W. A. Dixon, supt.

Ia., Des Moines—Hospital—City General Hospital plans 5-story, 45 x 143-ft., East 12th and Des Moines Sts.

Minn., Duluth—High School—Bd. Educ. soon lets contract for 3-story, 66 x 180-ft. About $120,000. Croft & Boerner, Fidelity Bldg., archts.

Minn., Hastings—Asylum — State plans addition and alteration to west wing. About $60,000. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, archt.

Minn., Hibbing—School—Bd. Educ. having plans prepared by W. T. Bray, archt., 1200 Fidelity Bldg., Duluth, for 2-story, 60 x 80-ft. addition. About $50,000.

Minn., Minneapolis—Church—3rd Church Christ Scientist, 650 McKnight Bldg., having plans prepared by S. S. Beman, archt., for 2-story. About $75,000. A. P. Abell, member bldg. com.

Minn., Minneapolis — School — Bd. Educ. receives in January for 3-story, 75 x 130-ft. brick addition. About $95,000. Tyrie & Chapman, Auditorium Bldg., archts.

Minn., Wells—High School — Bd. Educ. having plans prepared by F. W. Kinney, archt., Plymouth Bldg., for 1-story, 60 x 144 ft. About $60,000.

Minn., Willmar—High School—Bd. Educ. having plans prepared by Tyrie & Chapman, archts., 320 Auditorium Bldg., for 3-story, 75 x 130-ft. addition. About $95,000.

Kan., Abilene—School — Dickinson Co. sold $90,000 bonds and will soon let contract for school.

Kan., Atchison—Hospital—Atchison Hospital Assn. having plans prepared by W. A. Saylor, archt., 606 Gumbel Bldg., Kansas City, Mo. for addition. About $75,000.

Kan., Junction City—School—City plans election to vote on $100,000 bonds to build 2 schools. W. L. Phillips, clk.

Kan., Winfield—Hospital — St. Mary's Hospital, 1210 East 9th St., had plans prepared by J. M. Fuller, archt., Crowley Bank Bldg., Wichita, for 3-story, 34 x 120-ft. About $60,000.

Mont., Missoula — Theater — Missoula Theater Co., East Main St., plans. About $90,000.

Mo., Kansas City—Club — Kansas City Athletic Club soon lets contract on 11th St. and Baltimore Ave. About $1,000,000. A. Young, chn. bldg. com.

Okla., Oklahoma — School — State had plans prepared by J. Hicks, archt., Capitol, Durant, for medical school. About $200,000.

Okla., Pauls Valley—High School—City plans election to vote on $50,000 bonds for school.

Okla., Tulsa — Terminal — Atchison, Topeka & Santa Fe R.R. having plans prepared. About $800,000. C. F. W. Felt, Chicago, ch. engr.

Colo., Alamogordo — High School — Bd. Educ. had plans prepared by Trost & Trost, archts., 817 Mill Bldg., El Paso, Tex. About $58,500.

Cal., Los Angeles — High School — Bd. Educ. having plans prepared by N. F. Marsh, archt., 211 Bway., Central Bldg., for 2-story, 84 x 102-ft. brick and concrete addition to Hollywood High School. About $55,000.

Que., Quebec—Exposition — Comn. Provisional Exposition had plans prepared by L. Auger, archt., St. John St. About $500,000.

BIDS DESIRED

Vt., Springfield — (Official) — Hospital—Until Jan. 5, by H. L. Walker, archt., 19 West 44th St., New York City, 2-story, 40 x 65-ft. for Springfield Hospital. About $50,000. Noted Dec. 20.

N. Y., Chenango Bridge—(Official)—Hospital—Until Jan. 7, by Bd. Supervs. Broome Co., building 2 story tuberculosis hospital, including 2 patients pavilions, administration building, power house and garage. About $130,000. W. H. Whitlock, 602 Security Mutual Bldg., Binghamton, archt.

Wis., Waukesha — High School — Until Jan. 15, by Bd. Educ. for 3-story, 127 x 218-ft. addition. About $150,000. A. S. Putney, 423 Main St., pres. Van Ryn & De Gelleke, Caswell Blk., Milwaukee, archts.

Minn., Duluth—(Official)—School—Until Feb. 15, by Bd. Educ., for school, 8th Ave. and 13th St. About $100,000. Croft & Boerner, 301 Palace Bldg., Minneapolis, archts. Noted Dec. 13.

Kan., Peabody—(Official)—High School—Until Jan. 3, by Bd. Educ., for 2-story, 65 x 110-ft. addition. About $50,000. Crowell & Van Meter, 604 Murdock Bldg., Wichita, archts. Noted Dec. 13.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Haverhill**—Hospital — City let contract, 3-story, 40 x 140-ft. and 1-story, 25 x 50 ft., to J. M. Roche, 665 Primrose St., $75,000. Noted Nov. 22.

★**N. Y., New Hampton**—(Official)—Reformatory—B. G. Lewis, comr. correction, Municipal Bldg., New York City, let contract construction of reformatory, including cubicle and infirmary dormitories, laundry, storage and industrial buildings, to J. T. Brady, 103 Park Ave., New York City. About $300,000. Noted Dec. 6.

★**O., Akron**—High School—Bd. Educ. let contract for 2- or 3-story, to Carmichael Constr. Co., 524 Hamilton Bldg., $262,328. Noted Dec. 6.

★**O., Coshocton**—Bank—Commercial Natl. Bank Bldg., let contract, 1-story, 21 x 100-ft., to S. Watertown Co., 343 South Dearborn St., Chicago, $60,000.

★**Kan., Clyde** — School — Bd. Educ. let contract 2-story, 81 x 112-ft. brick, to Sanneman Bros. Constr. Co. About $50,000.

★**Neb., Randolph**—Church—Frances De Choutal congregation let contract to J. J. Smith Constr. Co., 815 5th St., Sioux City, Ia. About $50,000. Noted July 5.

★**Mo., St. Joseph** — (Official) — Store—J. Geiger, 614 Francis St., let contract, 5-story, 107 x 123-ft. brick and rein.-con., to Sawhon Stamey Co., 212 North 7th St., $200,000. Noted Dec. 13.

★**Okla., Sapulpa** — High School — Bd. Educ. let contract, 3-story, brick, stone and rein.-con. to Manhattan Constr. Co., 3rd and Fond du Lac Sts., Muskogee. About $200,000. Noted Nov. 8.

★**Ont., Toronto**—School—Bd. Educ. let contract rein.-con. addition, to H. Lucas & Son, 141 Havelock St. About $90,000.

FEDERAL GOVERNMENT WORK

Proposed Work

N. J., Woodbury—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids opened Nov. 23, as all were in excess of appropriation. Noted Nov. 29.

Pa., Phila.—Temporary Storage Building—Bids will soon be received at Navy Yard, Phila.; Specification No. 2575.

Md., Annapolis — Outside Distributing Systems—Bureau Yards and Docks, Navy Dept., Wash., plans. About $25,000; Specification No. 2754.

Md., Baltimore—Quartermaster's Warehouse—I. Littell, Brig. Gen., War Dept., Wash., plans.

W. Va., Charleston—Pit for Furnace—Bureau Yards and Docks, Navy Dept., Wash., plans rein.-con. pit for furnace. About $18,000; Specification No. 2756.

Ill., Chicago—Quartermasters Warehouse—I. Littell, Brig. Gen., War Dept., Wash., plans.

Federal Government Work (Continued)

BIDS DESIRED

Mass., Chelsea—Hospital—Until Jan. 14, by Bureau Yards and Docks, Navy Dept., Wash., building at Naval Sta. About $15,000; Specification No. 2751.

N. Y., Brooklyn—Power House Superstructure—Until Jan. 7, by Bureau Yards and Docks, Navy Dept., Wash., building at Navy Yard, Brooklyn; Specification No. 2585.

Del., Wilmington—Dredging—Until Jan. 11, by U. S. Engr. Office, Old Federal Bldg., Wilmington, dredging Inland Waterway between Rehoboth Bay and Delaware Bay. Noted Sept. 13; advertised in this issue.

O., Cincinnati—Lock Gates—Until Jan. 18, by U. S. Eng. Office, Cincinnati, furnishing, delivering and erecting gates for locks Nos. 33 and 39, Ohio River.

Colo., Denver — Excavators — Until Feb. 5, by U. S. Recl. Serv., Denver, furnishing dragline excavators. A. P. Davis, ch. engr.

Cal., San Pedro—Distribution System—Until Jan. 3, by Constructing Quartermaster, 1206 Pacific Ave., San Pedro, building gas and water distribution systems at Ft. MacArthur.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Pa., Phila.—Quartermasters Warehouse —I. Littell, Brig. Gen., War Dept., Wash., let contract to W. Steele & Son, 30 South 15th St., Phila., cost plus percentage.

★Kan., Ft. Leavenworth—Military Prison —I. Littell, Brig. Gen., War Dept., Wash., let contract addition, to R. P. Yoakum, Ft. Leavenworth. About $500,000, cost plus percentage.

★Tex., Ft. Worth—Experimental Station —Brig. Genl. I. Littell, War Dept., Wash., and not Bureau of Yards and Docks, let contract to Bryce Bldg. Co., 909 Throckmorton St. About $1,000,000; cost plus percentage.

MISCELLANEOUS

Proposed Work

Dock Wall—Canandaigua, N. Y.—(Official)—W. W. Wotherspoon, supt. pub. wks., Capitol, Albany, soon receives bids for concrete dock wall at Lake Harbor, Ontario Co., involving 1200 cu.yd. excav. and backfill, 610 cu.yd. second-class concrete, 7.5 M ft. B.M. sawed lumber, 111 M ft. B.M. wooden sheet piling, 8500 lb. iron and steel fastenings, 1800 lb. metal reinforcement and cutting off tops of piles.

Incinerator Plant—Menominee, Mich.—City plans.

Dam—Traverse City, Mich.—See "Industrial Works."

Transmission Line — Alameda, Cal. — Southern Pacific Co., San Francisco, plans power transmission line to operate electric system. About $60,000. W. Hood, ch. engr.

Dyke—Ft. Frances, Ont.—Ontario & Minnesota Power Co. having plans prepared for dyke. About $50,000.

BIDS DESIRED

Intake Pier — Tonawanda, N. Y. — See "Water-Works."

Piers—Phila., Pa.—(Official)—Until Jan. 8, by G. S. Webster, dir. dept. Wharves, Docks and Ferries, building Pier No. 78, South, Moyamensing Group in Delaware River, foot of McKean St.; advertised in this issue.

Harbor Improvements — Mobile, Ala. — Until Feb. 11, by H. Pillans, comr. of Docks and Wharves, building wharf and bulkhead on Arlington Dock site involving 5720 lin.ft. yellow pine piling, 20-55 ft. long; 7200 lin.ft. on top of bulkhead; 8000 lin.ft. bulkhead and 2,624.000 ft. sheet piling. Wright Smith, city engr. Noted Sept. 6.

Retaining Wall—California—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Bulkhead and Wharf—Provincetown, Mass.—S. Skaroff & Sons, Railroad Ave., let contract to Kendle-Stoddard Co., 271 Marginal St., Chelsea, $150,000.

★Tunnel — Waterbury, Conn. — See "Industrial Works."

★River Channel Improvements — Columbus, O.—(Official) — G. A. Bordea, dir. pub. serv., let contract widening Scotia River involving 1,960,500 cu.yd. excav., 34,000 cu.yd. concrete, 9800 lin.ft. concrete toe wall, 36,100 sq.yd. concrete revetment, 50,000 cu.yd. solidified embankment, 377 M ft. B. M. sheet piling, 33,500 lin.ft. wood piling, 1,340,000 lb. reinforcing steel, 1370 lin.ft. steel curb, 3000 lin.ft. concrete curb, 15,000 sq.ft. cement walk, 2600 sq.yd. stone block paving, 6600 cu.yd. gravel fill, 3000 tons riprap, 6050 sq.yd. waterproofing, 10,700 sq.ft. sidewalk finish, 80 lin. ft. 15 in. pipe drain, 36,100 sq.yd. stone revetment, bridges sluice gates, manholes, etc. to W. E. Callahan Constr. Co., 1517 City Natl. Bank Bldg., Omaha, Neb., $1,993,775. Noted Dec. 13.

NASSAU COUNTY, NEW YORK, TO SPEND $104,000 ON ROADS

Forty-two roads in the Town of Hempstead will be improved during the coming year at an expense of $104,000. Archibald G. Patterson, Town Superintendent of Highways, has entered into a contract with the Town Board for the improvement of these roads. Twenty thousand dollars more will be spent for oiling Peekskill gravel and dirt roads. Another allowance is also made for the upkeep of all roads in the town, which means in short that 1000 miles of roadway will be maintained at $50 a mile.

The roads to be improved throughout the town are as follows:

Rita Ave., New Hyde Park, Jericho Turnpike to the L. I. R.R. tracks, 1200 ft., with Peekskill gravel at a cost of $1500.

Waverly Ave., Seaford, from Jackson Ave. to the Seaman Neck Rd., 1200 ft., with Peekskill gravel, at a cost of $1500.

Oak Ave., South Hempstead, from the Baldwin Rd. to Nassau Rd., 900 ft., with Peekskill gravel, at a cost of $1000.

Henry St., Valley Stream, from Hendrickson Ave. to the Comstock property, 2000 ft., with Peekskill gravel, at a cost of $2200.

Railroad Ave., West Hempstead, from Hempstead Ave. to the Hempstead Gardens station, 1800 ft., with Peekskill gravel, at a cost of $1800.

Chestnut St., West Hempstead, from Hempstead Ave. to Woodfield Rd., 2000 ft., with Peekskill gravel, at a cost of $2000.

Lincoln Ave., Roosevelt, from Mansfield Ave. to Fire Engine House, 1250 ft., with Peekskill gravel, at a cost of $1500.

Leonard Ave., Roosevelt, from Nassau Rd. to Fire Engine House, 1200 ft., with Peekskill gravel, at a cost of $1300.

Newbridge Rd., Bellmore, from Merrick Rd. to Grand Ave., 1500 ft., with Peekskill gravel, at a cost of $1800.

Wilson Ave., Wantagh, from the brook to Park Ave., 1000 ft., with Peekskill gravel, at a cost of $1000.

Lord Ave., Inwood, from Bayview Ave. to L. I. R.R. Depot, 650 ft., concrete, at a cost of $5200.

Oceanside Rd., Oceanside, from Foxhurst Rd. to John Higgins' corner, 1800 ft., with Peekskill gravel, at a cost of $2200.

Brower Ave., Oceanside, from Grand Ave., leading to the Oaks, 1500 ft., with Peekskill gravel, at a cost of $2000.

Clinton Rd., Garden City, from Long Island Motor Parkway to the Old Country Rd., 3100 ft., with Peekskill gravel, at a cost of $6000.

Meadowbrook Rd., Merrick, from Hempstead-Babylon Turnpike to Washington Ave., 4500 ft., with Peekskill gravel, at a cost of $5000.

Main St., Hempstead, from the Garden City line to the village of Hempstead line, 500 ft., with Peekskill gravel, at a cost of $500.

Jefferson Pl., South Hempstead, from Graham to Elizabeth Ave., 500 ft., with Peekskill gravel, at a cost of $600.

Milburn Ave., Baldwin, from Church St. to the creek, 3200 ft., with Peekskill gravel, at a cost of $4760.

Oceanside Ave., or Lower Lincoln Ave., Oceanside, from Long Beach Rd. to Rockaway Rd., 1200 ft., with warrenite, at a cost of $8000.

Front St., Hempstead, from the west village line to Hempstead Ave., 150 ft., with warrenite at a cost of $1100.

Washington Ave., Seaford, from L. I. R.R. tracks, leading to the Hidelberg property, 1000 ft., at a cost of $1000.

Everitt's Lane, Malverne, from Hempstead Ave., to Ocean Ave., 3000 ft., with Peekskill gravel, at a cost of $400.

Bloomingdale Ave., East Meadow, from Galleweilder's corner to the Oyster Bay town land, 2500 ft., with Peekskill gravel, at a cost of $3000.

East Broadway or Seaman's Neck Rd., Central Park, from the Oyster Bay town line to Alfred M. Suydam's property, 2500 ft., with Peekskill gravel, at a cost of $3000.

Grove St., south, Valley Stream, from Forest Ave. to Rockaway Ave., 1200 ft., with Peekskill gravel, at a cost of $1500.

Dogwood Ave., Munson, from John St., leading to Rasweiler's farm, for one mile, with Peekskill gravel, at a cost of $7000.

Carman Ave., East Meadow, from 1000 ft. north of Dutch Lane to Old Country Rd., 2500 ft., with Peekskill gravel, at a cost of $2500.

North Jerusalem Rd., Island Trees, from Garner's farm to Bellmore Ave., one-half mile, with Peekskill gravel, at a cost of $3500.

Uniondale Ave., Uniondale, from Catholic Church property to Jerusalem Ave., 2500 ft., with Peekskill gravel, at a cost of $3000.

Valley Stream Blvd., Valley Stream, from Rockaway Ave. to Central Ave., 2000 ft., with Peekskill gravel, at a cost of $2500.

Fulton Ave., Roosevelt, from Nassau Rd. to Centennial Ave., 2000 ft., with Peekskill gravel, at a cost of $2500.

Whitehouse Ave., Roosevelt, from Nassau Rd. to Charles St., 2000 ft., with Peekskill gravel, at a cost of $2500.

Charles St., Roosevelt, from Whitehouse Ave. to Woods Ave., 800 ft., with Peekskill gravel, at a cost of $800.

Woods Ave., Roosevelt, from Nassau Rd. to Charles St., 1400 ft., with Peekskill gravel, at a cost of $1800.

Newbridge Rd., Bellmore, from Bellmore Ave. to Heck's farm, 2000 ft., with Peekskill gravel, at a cost of $2500.

Bellmore Ave., Bellmore, from the Merrick Rd. to the Bellmore Dock, 2000 ft., with Peekskill gravel, at a cost of $2500.

Wantagh Ave., Wantagh, from Newbridge Rd. to Schneider's store, 400 ft., with Peekskill gravel, at a cost of $4000.

Mill Rd., Wantagh, from Wilson Ave. to Ryder's Gardens, 1500 ft., at a cost of $2000.

School St., Wantagh, from Clark Ave. to the schoolhouse, 1000 ft., with Peekskill gravel, at a cost of $1000.

Railroad Ave., West Hempstead, from Hempstead Gardens station to the L. I. R.R. property, 3000 ft., with Peekskill gravel, at a cost of $3200.

Beverly Ave., West Hempstead, from Jerusalem Ave. to Front St., 2500 ft., with Peekskill gravel, at a cost of $3000.

Cruikshank Ave., South Hempstead, from Franklin St. to the Hempstead village line, with Peekskill gravel, for 1000 ft., at a cost of $1000.

BARGE CANAL WORK, ALBANY, N. Y.

Contract 181

Bids were received by W. W. Wotherspoon, supt. pub. wks., Capitol, for repairing and waterproofing existing concrete lining and placing new concrete lining in canal at Little Falls, from (A) Law Bros., Herkimer; (B) Dale Eng. Co., Inc., 23 Mann Bldg., Utica; (C) P. B. McCaghey Co., 569 East Main St., Little Falls; (D) Shay Contg. Co., 23 Down Bldg., Albany, $71,711; (E) Peckham Constr. Co., Inc., Mutual Life Bldg., Buffalo, $77,969. The unit bids of the 3 lowest bidders were as follows:

	A	B	C
2,400 cu.yd. excavation	$1.25	$3.00	$2.00
900 sq.yd. removing existing concrete lining	1.00	3.00	2.00
800 cu.yd. first-class concrete	15.00	15.00	20.00
2,100 cu.yd. second-class concrete	11.00	12.50	14.50
840 lb. wire mesh reinforcement	.10	.15	.12
76,000 sq.ft. waterproofing	.17	.21	.20
Cofferdams, pumping, bailing and draining (lump sum)	800.00	2,500.00	500.00
200 drilling holes in concrete lining	1.00	2.50	1.50
Extended totals	$54,694	$69,321	$71,139

Contractors Constructing the Cantonments

National Army Cantonments

Approximately $8,000,000 each

Camp	Contractor
Devens, Ayer, Mass.	Fred T. Ley Co., Inc.
Upton, Yaphank, L. I.	Thompson-Starrett Co.
Dix, Wrightstown, N. J.	Irwin & Leighton
Meade, Admiral, Md.	Smith, Hauser, MacIsaac
Lee, Petersburg, Va.	Rinehart-Dennis Co.
Jackson, Columbia, S. C.	Hardaway Construction Co.
Gordon, Atlanta, Ga.	Arthur W. Tufts Co.
Sherman, Chillicothe, Ohio	A. Bentley & Sons
Taylor, Louisville, Ky.	Mason & Hanger
Custer, Battle Creek, Mich.	Porter Bros.
Grant, Rockford, Ill.	Bates, Rogers Con. Co.
Pike, Little Rock, Ark.	Jas. Stewart & Co.
Dodge, Des Moines, Iowa	Chas. Weitz's Sons
Funston, Fort Riley, Kan.	Geo. A. Fuller Co.
Travis, Ft. Sam Houston, Tex.	Stone & Webster
Lewis, American Lake, Wash.	Hurley, Mason & Co.

National Guard Camps

Approximately $2,000,000 each

Camp	Contractor
Greene, Charlotte, N. C.	Consolidated Eng. Co.
Wadsworth, Spartanburg, S. C.	Fiske, Carter Con. Co.
Hancock, Augusta, Ga.	T. O. Brown & Son
McClellan, Anniston, Ala.	J. O. Chisalm & Co.
Sevier, Greenville, S. C.	Gallivan Bldg. Co.
Wheeler, Macon, Ga.	W. Z. Williams Co.
McArthur, Waco, Tex.	F. H. Jones Con. Co.
Logan, Houston, Tex.	American Con. Co.
Cody, Deming, N. M.	J. W. Thompson
Doniphan, Ft. Sill, Okla.	Solden-Breck Con. Co.
Bowie, Ft. Worth, Tex.	J. W. Thompson
Sheridan, Montgomery, Ala.	A. Blair
Shelby, Hattiesburg, Miss.	J. S. Moody & Co.
Beauregard, Alexandria, La.	Stewart McGhee
Kearney, Linda Vista, Calif.	W. E. Hampton
Fremont, Palo Alto, Calif.	Lindgren & Co.

Miscellaneous Cantonments

Camp	Contractor
Merrit, Tenafly, N. J. (Work done in conjunction with Port Newark, N. J.)	MacArthur Bros.
Johnston, Black Point, Fla. (Completed)	A. Bentley & Sons
Ordway, Washington, D. C. (Completed)	P. F. Gormiley Co.

Ordnance Department Depots

Camp	Contractor
Port of Embarkation, Newport News, Va. (Completed; cost in millions)	Westinghouse, Church, Kerr & Co.
Port Newark Terminal, Newark, N. J. (Work underway; cost in millions)	MacArthur Bros.
Ordnance Depot, Raritan River, N. J. (Approximately $6,000,000)	Snare & Triest Co.
Munition Storage, Turner Station, Md.	F. B. Watts Co.
Ordnance Depot, Curtis Bay, Md. (Approximately $3,000,000)	Smith, Hauser, MacIsaac
Ordnance Depot, Pig Point, Va. (Approximately $500,000)	Jas. T. Stewart & Co.

Coast Artillery Posts

Camp	Contractor
Fort Wright, New London, Conn.	Sperry Eng. Co.
Fort Terry, New London, Conn. ($196,000)	Sperry Eng. Co.
Forts Totten, Hamilton, Hancock, Wadsworth and Schuyler, in New York ($654,000)	Turner Const. Co.
Fort Dupont, Del. ($21,800)	Horace H. Jackson
Fort Howard, Md. ($65,400)	Consolidated Eng. Co.
Fort Monroe, Va. ($87,200)	Hampton Roads Eng. and Constr. Co.
Fort Caswell, N. C. ($65,400)	
Fort Taylor, Key West, Fla., Dade, Tampa, Fla. ($65,400)	W. R. Richardson
Fort Rosecrans, Calif. ($109,000)	W. E. Hampton & Co.
Fort McArthur, Calif. ($196,200)	W. E. Hampton & Co.
Fort Winfield Scott, Calif. ($196,200)	Dinwiddie Constr. Co.
Fort Stevens, Ore. ($65,400)	Dinwiddie Constr. Co.
Fort Columbia, Wash. ($43,600)	Dinwiddie Constr. Co.
Fort Canby, Wash. ($43,600)	Dinwiddie Constr. Co.
Fort Worden, Wash. ($109,000)	Dinwiddie Constr. Co.
Fort Casey, Wash. ($109,000)	Sound Cons. and Eng. Co.
Fort Flagler, Wash. ($109,000)	Sound Cons. and Eng. Co.
Fort Tilden, N. Y. ($21,800)	Jas. Stewart & Co.

Mobile Ordnance School Barracks

Camp	Contractor
Peoria, Ill. (Approximately $10,000)	F. B. Hasbrouck
Kenosha, Wis. (Approximately $10,000)	Paschen Bros.
Clintonville, Wis. (Approximately $10,000)	Henry C. Lengstock

Medical Department

Camp	Contractor
Extensions to General Hospital No. 1, New York City	Wm. Crawford
Fox Hill Property, Staten Island, N. Y.	Not awarded
Camp Mills, Mineola, L. I.	Not awarded
Otisville, N. Y.	Abandoned; could not secure site
Iselin, Rahway	Not awarded
Fort McHenry, Baltimore	Not awarded
Billings Estate, on Hudson	Not awarded
Soldiers' Home, Washington, D. C.	Not awarded

Hospitals Proposed and Under Construction

These hospitals will be extended wherever practical for use as reconstruction hospitals.

BASE HOSPITALS AT CANTONMENTS

NATIONAL ARMY

Camp Lewis, American Lake, Wash.
Camp Meade, Annapolis, Junction
Camp Gordon, Atlanta, Ga.
Camp Devens, Ayer, Mass.
Camp Custer, Battle Creek, Mich.
Camp Jackson, Columbia, S. C.
Camp Dodge, Des Moines, Iowa
Fort Riley, Kansas
Camp Travis, Fort Sam Houston, Texas
Camp Pike, Little Rock, Ark.
Camp Taylor, Louisville, Ky.
Camp Lee, Petersburg, Va.
Camp Grant, Rockford, Ill.
Camp Dix, Wrightstown, N. J.
Camp Upton, Yaphank, L. I.

NATIONAL GUARD

Camp Beauregard, Alexandria, La.
Camp McClellan, Anniston, Ala.
Camp Hancock, Augusta, Ga.
Camp Green, Charlotte, N. C.
Camp Cody, Deming, N. M.
Camp Doniphan, Fort Sill, Okla.
Camp Bowie, Fort Worth, Texas
Camp Sevier, Greenville, S. C.
Camp Shelby, Hattiesburg, Miss.
Camp Logan, Houston, Texas
Camp Kearney, Linda Vista, Cal.
Camp Wheeler, Macon, Ga.
Camp Sheridan, Montgomery, Ala.
Camp Wadsworth, Spartanburg, S. C.
Camp McArthur, Waco, Texas

U. S. GENERAL HOSPITALS

No. 1—Gun Hill Rd. & Bainbridge Ave., Williamsbridge, N. Y.
No. 2—Ft. McHenry, Md.
Walter Reed General Hospital, Tacoma Park, D. C.
Fort Bayard, New Mexico
Army & Navy Gen. Hospital, Hot Springs, Ark.
Letterman General Hospital, San Francisco, Calif.

U. S. A. BASE HOSPITALS

Fort Des Moines, Iowa
Madison Barracks, N. Y.
Fort McPherson, Ga.
Fort Oglethorpe, Ga
Fort Ontario, N. Y.
Plattsburg Barracks, N. Y.
Fort Logan H. Roots, Little Rock, Ark.
Fort Sam Houston, Texas
Fort Sheridan, Chicago, Ill.
Fort Sill, Okla.
Fort Snelling, Minn.
Van Couver Barracks, Washington

U. S. ARMY CAMP HOSPITALS

Camp Bartlett, Westfield, Mass.

Base Hospital
Camp Merritt, Tenafly, N. J.

Base Hospital
Camp Mills, Garden City, L. I.

Base Hospital
Camp Stuart, Newport News, Va.

U. S. A. BASE HOSPITAL

Fort Benj. Harrison, Ind.
Fort Bliss, Texas

Proposed Sites for Reconstruction Hospitals

Fox Hill Property, Staten Island
Billings Estate, On Hudson

NOTE.—Other sites will be selected and new hospitals erected. There are 200 projected, to accommodate 70,000 men.

Volume 79 Number 26

Engineering News-Record

A CONSOLIDATION OF ENGINEERING NEWS AND ENGINEERING RECORD

E. J. MEHREN, *Editor*

December 27, 1917

What Is Mill Building Construction? 1184
By F. W. Dean.
An Exposition of the Essentials governing this type of fire-resisting building and of the details that distinguish it.
Engineering News-Record, Dec. 27, 1917. 11¼ cols. Ill.

Philippine City's Lowland Raised by Harbor Dredging 1189
By W. C. A. Palmer.
Valuable River-Front Property in Iloilo developed by selling fill to private owners and by creating public areas.
Engineering News-Record, Dec. 27, 1917. 3 cols. Ill.

Building Frame Houses for Miners as a Contract Job 1191
By C. S. Rindsfoos.
Several Hundred Just Completed for West Virginia company—Model single house designed—Field methods used.
Engineering News-Record, Dec. 27, 1917. 4¼ cols. Ill.

Two Methods of Maintaining Gravel Roads in Maine 1193
Density of Traffic is criterion—Chief reliance is placed on annual tar treatment—Frost is worst enemy.
Engineering News-Record, Dec. 27, 1917. 3¾ cols. Ill.

Protecting Submerged Steelwork of Arch Bridge 1195
Ends of Steel Arches submerged by Government dam to be protected by enclosure wall and encasement with pitch.
Engineering News-Record, Dec. 27, 1917. 3 cols. Ill.

Five Million Yards Moved To Dam Three Rivers 1197
Structure for Bridgewater (N. C.) development built by hydraulic filling between outside embankments—Flow of two watersheds diverted on third.
Engineering News-Record, Dec. 27, 1917. 6 cols. Ill.

Activity in River Transportation Developed in 1917 1200
Work of Waterways Committee begins to tell—Barge lines starting on Mississippi—Attention to terminals.
Engineering News-Record, Dec. 27, 1917. 2¾ cols.

Syracuse Tests Two Methods of Sewage Treatment 1201
Activated-Sludge Process being studied alongside Dortmund tanks combined with aërated continuous gravel filters.
Engineering News-Record, Dec. 27, 1917. 1¼ cols.

New York Central Sets Long Plate Girder in Bridge 1202
Two Wrecking Cranes place 105-ton member, 131½ feet long and 10 feet deep, in complicated West Shore crossing.
Engineering News-Record, Dec. 27, 1917. 4 cols. Ill.

What Are the Limitations of Wood Pipe Under Fills? 1204
Failure Under 10-Foot Backfill emphasizes need for careful soil examination before specifying pipe strength.
Engineering News-Record, Dec. 27, 1917. 1½ cols.

Kankakee River Is Improved for Drainage of Marshes 1205
Channel Straightened and deepened will reclaim large area—Dipper-dredge excavation employed.
Engineering News-Record, Dec. 27, 1917. 2 cols. Ill.

Awakening Recognition of the Engineer 1206
A Canadian View which accords with progressive thought on this side of the international line.
Engineering News-Record, Dec. 27, 1917. 3 cols.

Panama Canal Slides Under Control 1207
Engineering News-Record, Dec. 27, 1917. 1 col.

Derrick Wrecks Concrete Building with Heavy Ball 1208
Roof and Floors shattered successively—Fire and torches help in breaking columns—Fire tried also on floors.
Engineering News-Record, Dec. 27, 1917. 3 cols. Ill.

City Management Does Not Mean Municipal Ownership 1209
H. M. Waite, city manager, Dayton, lays down reasons for coöperation between utilities and municipalities.
Engineering News-Record, Dec. 27, 1917. 1¼ cols.

Exhibit Board Educates Students in Current News 1210
Substantial, Expensive Construction made part of building to impress observers with importance of subjects.
Engineering News-Record, Dec. 27, 1917. 2½ cols. Ill.

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James H. McGraw, President
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Havemeyer Bars

Held Securely in Place by

Havemeyer Products

Makes the Ideal System of Reinforcement

"The Right Bar in the Right Place"

HAVEMEYER BAR SERVICE

Gives You the Steel When You Want It

CONCRETE STEEL COMPANY
42 BROADWAY, NEW YORK

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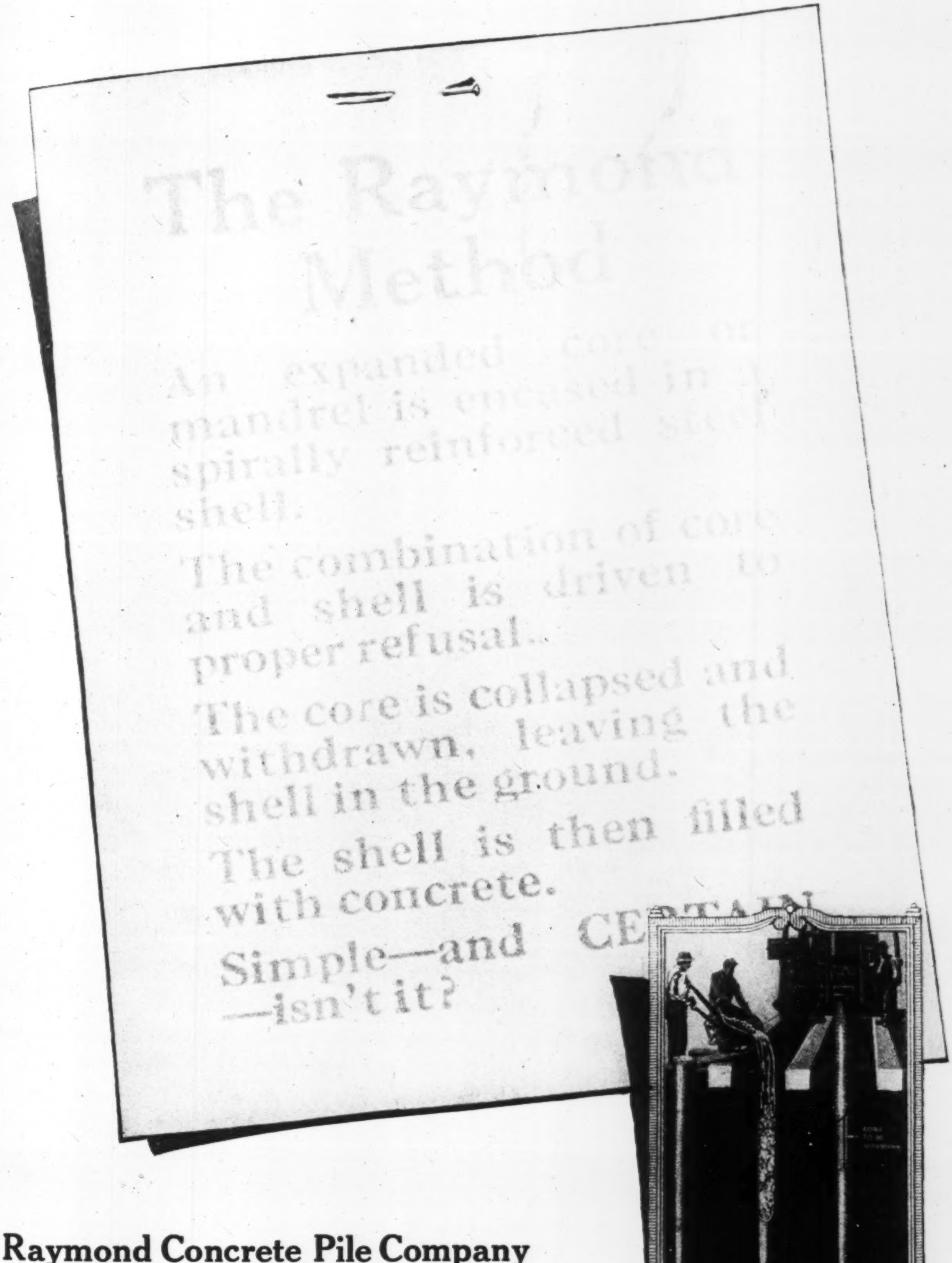

The Raymond Method

An expanded core or mandrel is encased in a spirally reinforced steel shell.

The combination of core and shell is driven to proper refusal.

The core is collapsed and withdrawn, leaving the shell in the ground.

The shell is then filled with concrete.

Simple—and CE
—isn't it?

Raymond Concrete Pile Company

New York Branch Offices in all Principal Cities **Chicago**
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"A Form for Every Pile—A Pile for Every Purpose"

REINFORCING STEEL IN STOCK

At Our Main Plant and Local Warehouses

A Friendly Word to Prospective Builders

Just now we are in good shape to promptly fill your orders for reinforcing steel for concrete, including **Kahn Bars, Rib Bars, Column Hooping, Floretyles, Rib Metal, Hy-Rib Metal Lath, Pressed Steel,** etc. We have stocks of steel at our main plant in Youngstown, Ohio, and at local warehouses in Boston, Mass., Philadelphia, Pa., Detroit, Mich., Chicago, Ill., Moline, Ill. and Portland, Oregon.

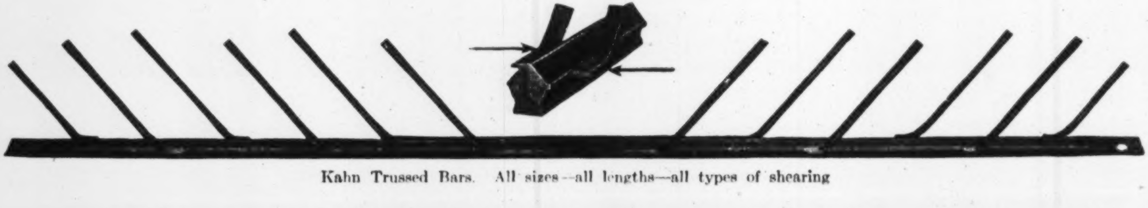
As is well known, the steel situation is critical; the demand for steel apparently greatly exceeds the supply. It is impossible to forecast how long we will be able to accept orders for steel. For this reason we are recommending to prospective builders that they figure out their future requirements and place orders at the earliest possible moment. We do not believe there is any prospect of lower prices in the near future, but feel that there is a positive danger of inability to secure steel at all.

Write, phone or telegraph us so we can quote on your requirements. We will also gladly furnish suggestions or be of any other service.

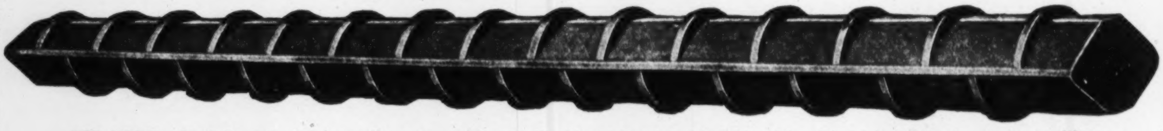
Reinforcing Steel Divison
TRUSSED CONCRETE STEEL COMPANY
YOUNGSTOWN, OHIO
Representatives in Principal Cities
Warehouses at Boston, Mass., Philadelphia, Penna., Detroit, Mich., Chicago, Ill., Moline, Ill. and Portland, Ore.

KAHN Building Products TRUSSED CONCRETE STEEL CO.

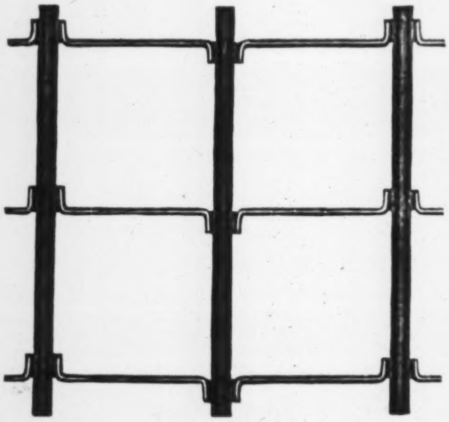
KAHN Building Products TRUSSED CONCRETE STEEL CO.



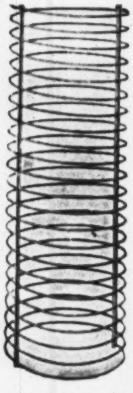
Kahn Trussed Bars. All sizes—all lengths—all types of shearing



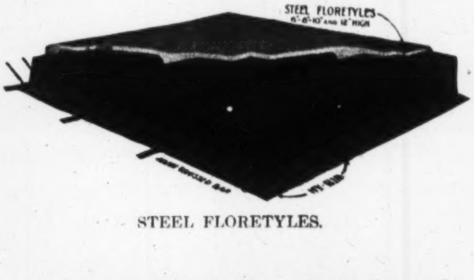
RIB BARS. Straight or bent to requirements—stock or mill shipments—sizes ⅜ in., ½ in., ⅝ in., ¾ in., 1 in., 1¼ in. (same area as either square or round bar of same size—all lengths.



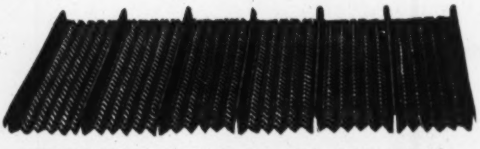
RIB METAL



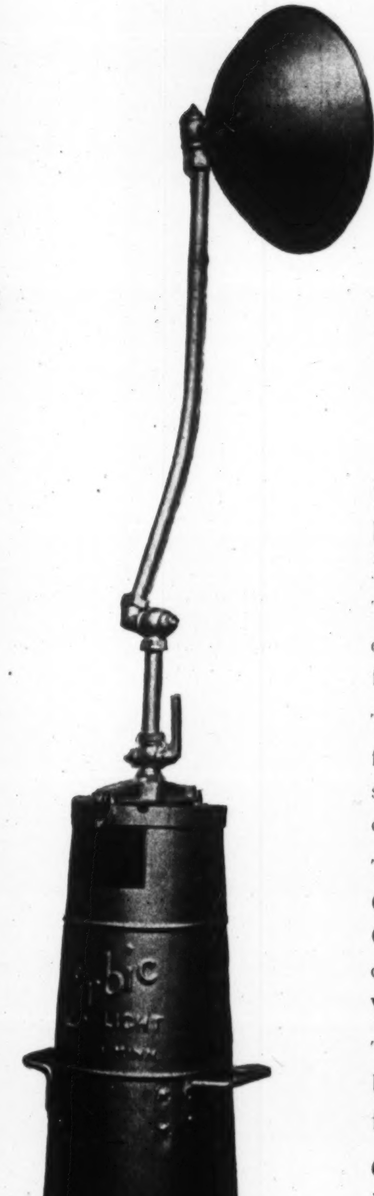
COLUMN HOOPING



STEEL FLORETYLES.



HY-RIB. Four depths of ribs, ⅜ in., 13/16 in., 15/16 in. and 1¾ in.



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TRADE MARK

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Test the **quality** of the light. See the clean, clear flame of the CARBIC. See its **volume** and **purity**—free from smoke or soot.

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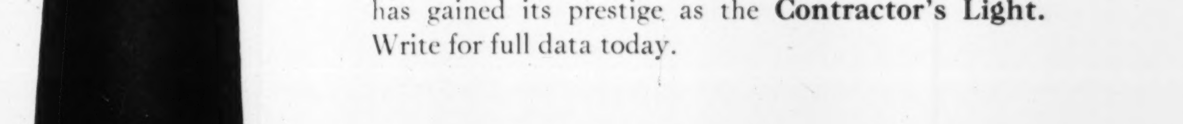

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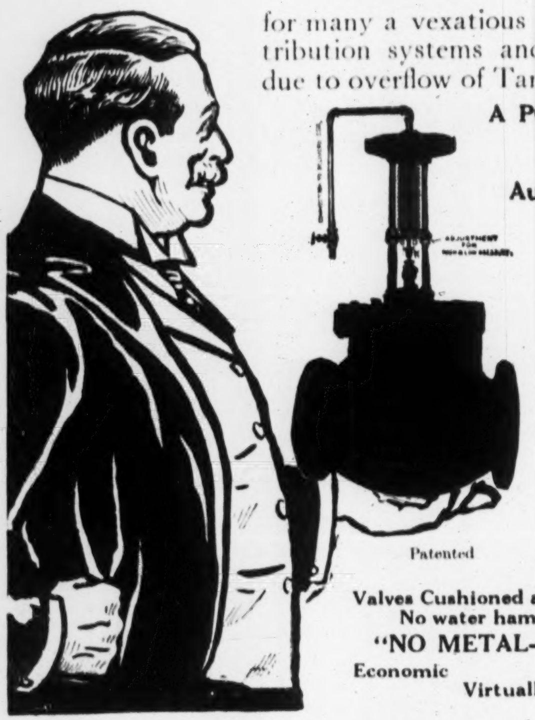
"Yes—They're the Valves I Want"

for many a vexatious problem in fire, sprinkler and other water distribution systems and a positive cure for all needless water waste due to overflow of Tanks, Standpipes and Reservoirs.

A POSITIVE WATER SUPPLY Absolutely Assured by

Golden-Anderson

Automatic Cushioned Controlling Altitude Valves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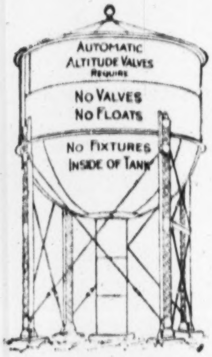
AUTOMATIC
ALTITUDE VALVES
REQUIRE
NO VALVES
NO FLOATS
NO FIXTURES
INSIDE OF TANK

For automatically maintaining Uniform Stage of Water in Tank, Reservoir or Standpipes. Doing away with the annoyances of Freezing and Float Fixtures inside or outside of Tanks. "Three Ways of Closing These Valves."

1st—Automatically by Water
2nd—By Electricity, if desired
3rd—By Hand.

May also be arranged to automatically close when a break occurs in the mains. When necessary they may be so connected as to "work both ways" on a single line of pipe. Sizes up to 24 in.

Valves Cushioned at all times by air and water
No water hammer or bursting mains
"NO METAL-TO-METAL SEATS"
Economic Sensitive Reliable
Virtually Indestructible

"Hosts of References"

Golden-Anderson

Automatic Cushioned Water Pressure Regulating Valves

Positive in action under every service condition. Always dependable. Perfectly cushioned both in opening and in closing. Made in sizes up to **24 in.**

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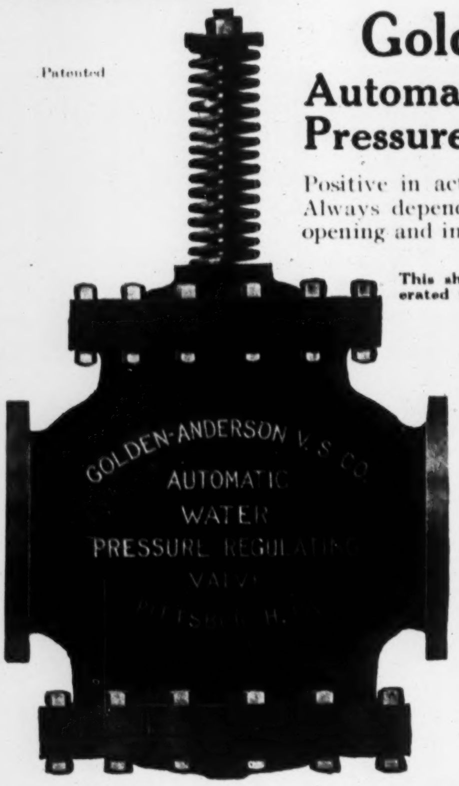
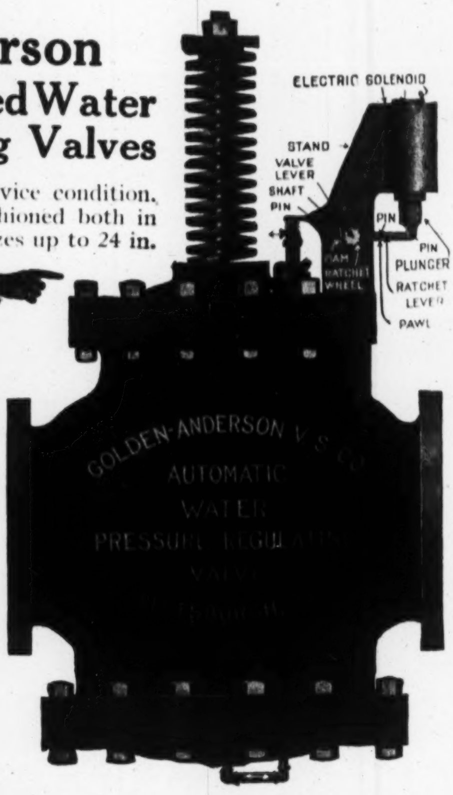

GOLDEN-ANDERSON V. S. CO.
AUTOMATIC
WATER
PRESSURE REGULATING
VALVE
PITTSBURGH, PA.

This shows the electrically-operated type "For Fire Service"

Fitted with a solenoid connected to a switch at any convenient point. In case of fire the valves are opened to full area. When full pressure is no longer required, by closing circuit a few seconds, pressing a button, the valves automatically return to normal position.

"Especially adapted for Water Works, Railroads and Industrial Plants" because of their correct mechanical construction and operation.


ELECTRIC SOLENOID
STAND
VALVE LEVER
SHAFT
PIN
PIN
PIN
PLUNGER
CAM
RATCHET WHEEL
RATCHET LEVER
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GOLDEN-ANDERSON V. S. CO.
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PRESSURE REGULATING

GOLDEN-ANDERSON VALVE SPECIALTY COMPANY
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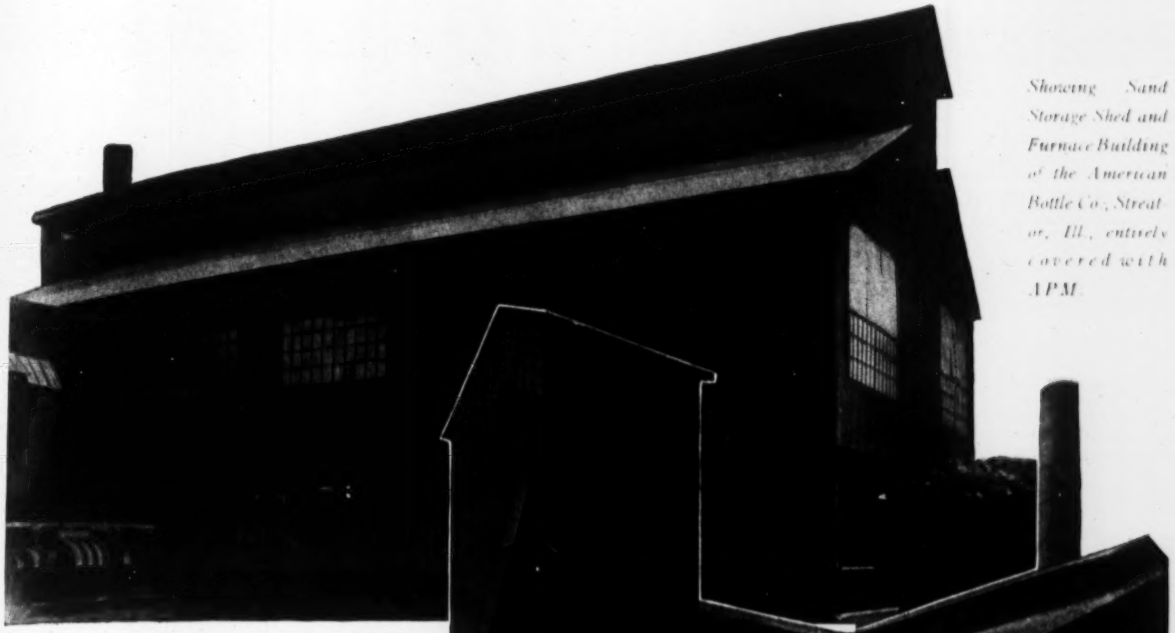
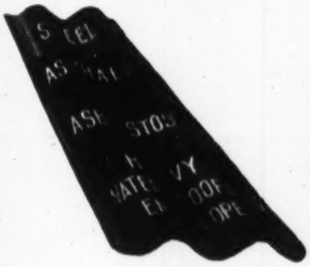


Showing Sand Storage Shed and Furnace Building of the American Bottle Co., Streator, Ill., entirely covered with APM.

The steel sheet is immersed in hot asphalt. Then pure asbestos felt is embedded on both sides and all edges in the hot asphalt. The entire sheet is finally sealed within a tough, waterproof envelope



Increased Construction Costs *Compel* more careful selection of materials

Higher prices for materials, and the increased wages and scarcity of labor make the selection of building materials a more important problem than ever before. The logical solution of this problem is the selection of *permanent* construction.

Asbestos Protected Metal

results in moderate-cost buildings involving neither maintenance nor depreciation charges. The steel core is permanently protected from rust and corrosion by moisture or acid fumes. Made in two permanent colors and never requires painting. THE FIRST COST IS THE ONLY COST.

Light as sheet steel but far more durable, APM saves the expense of heavy structural work. It can be applied to the lightest steel or wood purlins.

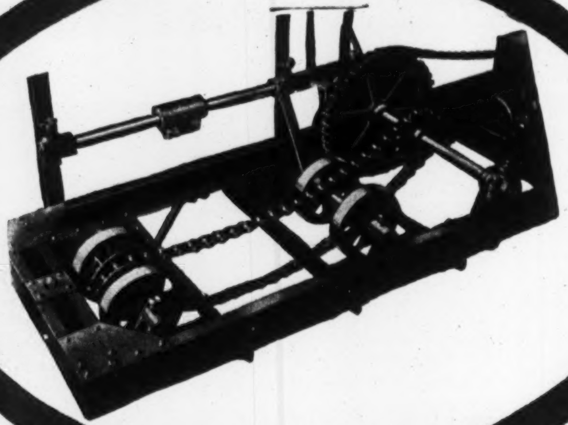
Bulletin 553 shows how you can increase the efficiency and decrease the expense of your next building. Write TODAY for your copy.

Cor Canada:
Canadian Asbestos Co.
Montreal

APM **Asbestos Protected Metal Co.**
Pittsburgh
First National
Bank Building

Dock House
Billeter Street
London

2094



Send the Coupon for Folder

on

SMITH

UNDER-SLUNG CHAIN DRIVE

From dozens of contractors we have received indisputable evidence and proof of the success of the SMITH UNDER-SLUNG CHAIN DRIVE.

Invariably they report that it has forever eliminated all chain trouble. You see the chain doesn't go around but **passes under the drum.** The chain may stretch but it can never slip. The weight of the drum acts as a constant and automatic tightener.

You're not up on the latest development in mixers unless you know all about the SMITH UNDER-SLUNG CHAIN DRIVE. And the price is unusually low.

Send the coupono for full information.

The T. L. SMITH COMPANY
3104-K Hadley Street, Milwaukee, Wis.

MAILING COUPON

Send me, without obligation on my part, copy of your

FOLDER NO. 154K-

describing your new 7-S Smith-Chicago Mixer with the UNDER-SLUNG CHAIN DRIVE.

Name....................................

St. No..................................

City....................................

State...................................

Equipped with low-charging platform if desired.

Erie Revolving Shovels

"The gang all thought they were kids again"

Bill Muldoon Says:

"It was a cold Christmas up in Montana. The thermometer flirted with forty below, and the steam shovel gang all looked like stuffed sausages, their clothes were so thick.

Andy Sullivan had two good monthly estimates and he felt flush. So he orders a big turkey feed for the boys, with all the trimmings—including a big barrel of stick candy—the kind you used to like when you were knee high.

Do you know that gang cut up like they were kids? Some of the old stiffs even hung up their socks. And not a man called for his time or went to town. They ate candy and played around like a bunch of ten-year olds.

Old Andy was a good boss, and his gang certainly appreciated it. They felt thankful that Christmas—just the way WE are feeling now, here at the Ball Engine Co.

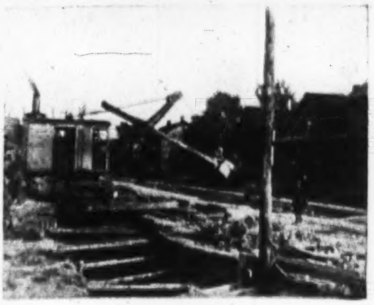
We're thankful for the way you contractors and engineers have given us orders for more and more ERIE SHOVELS. Ten ERIES to one company, six each to several others, five to another, and a long list of twos and threes that would open your eyes. There's only one reason of course—the ERIE has **made good.** And we're glad it has made good and we wish you a Merry Christmas and a Happy New Year.

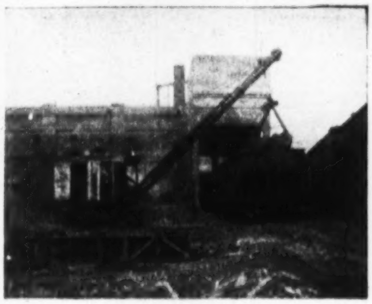
And lots more of 'em."

Bill Muldoon.

Would you like to have a good big photo of Bill Muldoon and his Erie Shovel, suitable for hanging on the wall?

We will give you one for Christmas—just write and tell us. "Please send photo of Bill Muldoon."





ONE MACHINE INSTEAD OF THREE

The Erie Shovel is such a fine machine for grading work that a contractor is apt to forget what it can do in addition to straight shovel service.

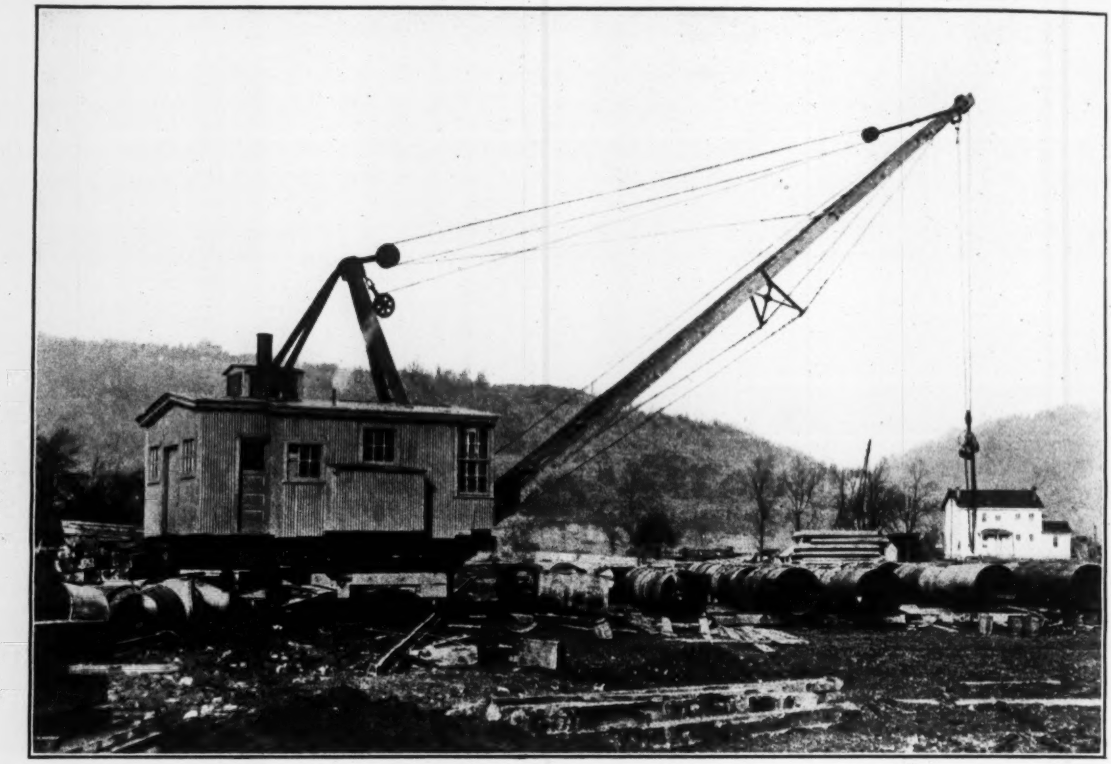
With a 22-ft. or 28-ft. dipper handle, the Erie digs trenches 14 to 18 feet deep, at the rate of two or three hundred cubic yards of material in an ordinary day's work.

With the inexpensive steel boom that we sell for the Erie, it is giving splendid service as a drag-line machine, and as a locomotive crane to operate a clam-shell or orange-peel.

And look close at that top photo. It shows the Erie with her standard dipper stick loading wagons that are standing on a 9-foot bank. With a longer dipper-handle, the Erie loads them on a 14-foot bank.

Ball Engine Co., Erie, Pa.

Find out which is the best revolving shovel on the market



WHIRLER

operating as a general purpose tool in storage yard.

This machine will handle 10 tons at a radius of 73 ft. from center pin; on account of its exceptional capacity; shifting is seldom necessary. Result:

Rapid loading and unloading.

Large storage area can be utilized.

Freight cars can be released promptly.

PROMPT SHIPMENT CAN BE MADE ON STANDARD MACHINES.

DRAVO-DOYLE COMPANY

PITTSBURGH, PA.

PHILADELPHIA INDIANAPOLIS CLEVELAND

A Shadowless Factory

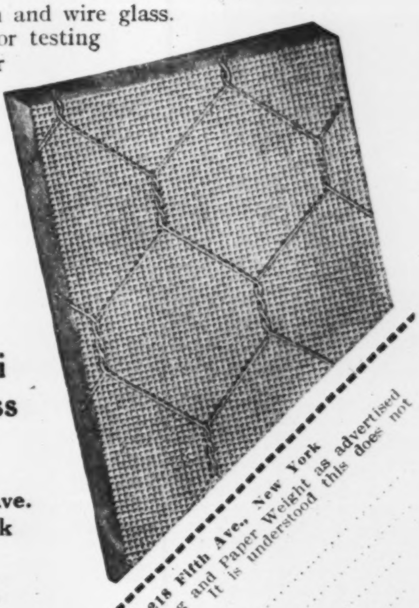
A big Government building 700 x 300 ft. was recently daylighted by over 100,000 sq.ft. of "FACTROLITE." In commenting upon the quality of the daylight *diffusion* in the big structure, engineers remarked—"You cannot see a shadow in any part of the building."

This perfect *diffusion* is a characteristic of "FACTROLITE," which was scientifically determined before we started to manufacture it. Every square inch of "FACTROLITE glass" is covered with 900 minute pyramids, each with a rounded apex and rounded fillets between.

They gather light from a wide angle and deflect it indoors—perfectly diffused. The result is that greater lighting *power* is attained, especially on dull days and the direct glare of the sun never interferes with work. Freedom from shadows is a third result and an important one, where fine mechanical precision is required.

FACTROLITE

is made in both plain and wire glass. A sample suitable for testing or use as a paper weight will be sent to industrial engineers on request.



The coupon will bring it at once.

**Mississippi
Wire Glass
Co.**

**218 Fifth Ave.
New York**

**Chicago
St. Louis**

Mississippi Wire Glass Co., 218 Fifth Ave., New York

Gentlemen: Send me a Catalog and Paper Weight as advertised in Engineering News-Record. It is understood this does not obligate me in any way.

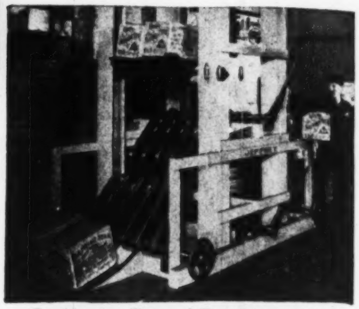
Name..

Address..

These are pictures of typical successful Jeffrey Conveyers for service in warehouses, office buildings, hotels and stores.

Multiple Chains with spurs at intervals. A neat substitute for an apron conveyer where merchandise can be dragged upon hardwood floors or steel strips, as shown.

Delivery end of a miscellaneous package conveyer at American Express Co., Boston.



Combination Fingered Tray Elevator handling general merchandise. Delivers four tray loads a minute.

Faster! Faster! Faster!

Each concern—each group of men is called on for more. "Faster! Faster! Faster!" is the cry. "Production must be increased—but you must eke out with the human beings you have—there are none to be spared."

Inclined Steel Apron Conveyer handling Miscellaneous Freight from the Basement of a Chicago Department Store.

Mechanical Aid is the greatest boon to labor. Hardly is there a problem but what can be helped by the installation of suitable

JEFFREY CONVEYERS

We build conveyers for all purposes. Jeffrey equipment is tested equipment. We stand ready to help fill it best to your work. The enveloping Jeffrey Conveying business has made it possible for us to adopt a system of standard units from which almost any conveyer can be built.

Bulletin No. 174-23 has the whole story of Jeffrey Conveyers in pictures. Write for a copy.

Handling U. S. Mail at Chicago

The Jeffrey Manufacturing Co.

923 North Fourth Street, Columbus, Ohio

New York
Boston
Philadelphia
Cleveland
Scranton
Pittsburgh
Charleston, W. Va.
Chicago
St. Louis
Birmingham
Dallas
Milwaukee
Denver
Seattle
Montreal

WIRE ROPE
IS BECOMING A SCARCE ARTICLE

As a matter of fact, soon you will hardly be able to bribe a manufacturer to sell you some.

And yet, you cannot stop hoisting and hauling on that account.

What are you going to do about it?

The obvious thing is to make your present equipment last as long as you can.

Take care of your wire rope. Don't strain it. Don't bruise it. Don't kink it. And, by all means, lubricate it properly. Protect it from the elements, from rust and from corrosion, "The Enemy Within." Protect it with

TEXACO CRATER COMPOUND

This wire rope lubricant is making wire rope last longer on all kinds of jobs.

TEXACO CRATER COMPOUND lubricates the outside of the rope so that it is not exposed to friction from the sheave wheels. It gets into the rope between the inner strands, stays there, prevents wear and chafing and internal failure.

Each and every strand is coated with a film of "CRATER."

TEXACO CRATER COMPOUND is neutral to acid or alkali. It protects the metal from chemical action. In other words, because the contaminated water and moist air cannot touch the steel, there is no rust—no corrosion. The rope lasts longer.

Thus, if you will treat your present ropes regularly with light applications of TEXACO CRATER COMPOUND, you will be repaid over and over again in increased useful life of the rope.

TEXACO CRATER COMPOUND is an investment and an insurance. You should know more about it. Be ready to meet "the wire rope famine." Get out your fountain pen. Fill in the coupon and get "Wire Rope Lubrication" by return mail.

WIRE ROPE LUBRICATION
THE TEXAS COMPANY

THE TEXAS COMPANY

TEXACO — Dept. N-1, 17 Battery Place,
New York City
HOUSTON CHICAGO NEW YORK
Offices in Principal Cities

There is a Texaco Lubricant for Every Purpose

The Texas Company, Dept. N-1,
17 Battery Place, New York City.
Kindly send me your free 48-page book on Wire Rope Lubrication.
I want to see how and why TEXACO CRATER COMPOUND
protects wire ropes from wear, rust and corrosion.

Name..........

Firm Name..........

Address..........

City..........

State..........

12-27-17

LOCK JOINT PIPE

cuts out Form Work and Guess Work

Photograph shows 90-inch Lock Joint Pipe used on Collins Ave. Contract, Borough of Queens, New York City. Lock Joint Pipe is the ideal pipe for particular work. The joint is made on the interior, doubly reinforced and absolutely uniform, perfectly smooth and positively watertight; it is easily inspected.

Build your next sewer or water line of Lock Joint Pipe and cut out all form work, delays, waiting on railroads and guess work.

Lock Joint Reinforced Pipe for Permanence. Our 100-page book of interesting photographs gives complete details on Lock Joint Pipe. Write today for your copy.

LOCK Trade Mark JOINT

LOCK JOINT PIPE COMPANY
165 Broadway, New York
Canada Lock Joint Pipe Co., Limited, Union Bank Building. Winnipeg, Man., Canada.
Pacific Lock Joint Pipe Co., Tacoma, Seattle, Wash.
Utah Lock Joint Pipe Co., Salt Lake City, Utah.

"MICHIGAN" Combination Steel and Wood PIPE

MICHIGAN PIPE

A Word to Engineers:

Since 1869 we have been furnishing to waterworks engineers and industrial engineers a water pipe made to meet **their specifications.**

We have a wealth of service data on the broad field covered by **MICHIGAN PIPE** in waterworks and industries. This field is constantly growing broader. Many of the installations may parallel the conditions which you are now considering for pipe line construction.

We will gladly submit our facts to any engineer. We can best present these if we are told the class of construction that you are contemplating—volume of flow required, source of supply, length of the line, gravity flow or direct pumping. If an estimate is required, please submit profile of the line.

Full data will be submitted to you at once.

THE MICHIGAN PIPE COMPANY

Dept. 17, Bay City, Michigan

Chicago 900 Lytton Building
Boston 93 Broad Street
New York 30 E. 42nd Street
Oklahoma City 71[illegible] Majestic Building
Cleveland 208 American Trust Building
Chattanooga 319 Hamilton Bank Building
Galveston 417 Security Building

"Steel for Strength—Wood for Durability"

SAFE—

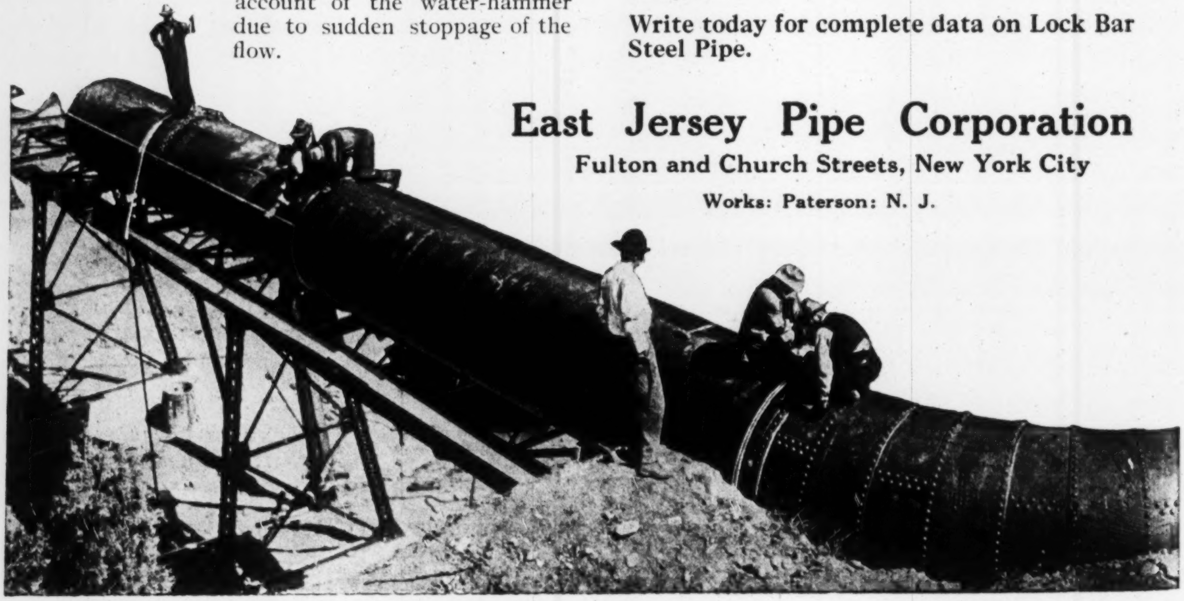
whether buried deep in a trench or high on a trestle

The additional strength with the same thickness of plate of LOCK BAR STEEL PIPE means a greater factor of safety and gives the ability to stand the extra loads of emergencies.

The super-strength of the Lock Bar 100% Joint eliminates the danger of bursting the pipe line when the pressure takes a sudden jump or on account of the water-hammer due to sudden stoppage of the flow.

Other advantages of Lock Bar Steel Pipe are the lower frictional resistance and greater carrying capacity over riveted steel pipe. The standard 30-ft. lengths are just right for shipping and speed up the construction work. All Lock Bar Pipe is protected inside and outside from corrosion by hot application of a high-resistance compound.

Write today for complete data on Lock Bar Steel Pipe.



East Jersey Pipe Corporation

Fulton and Church Streets, New York City

Works: Paterson: N. J.

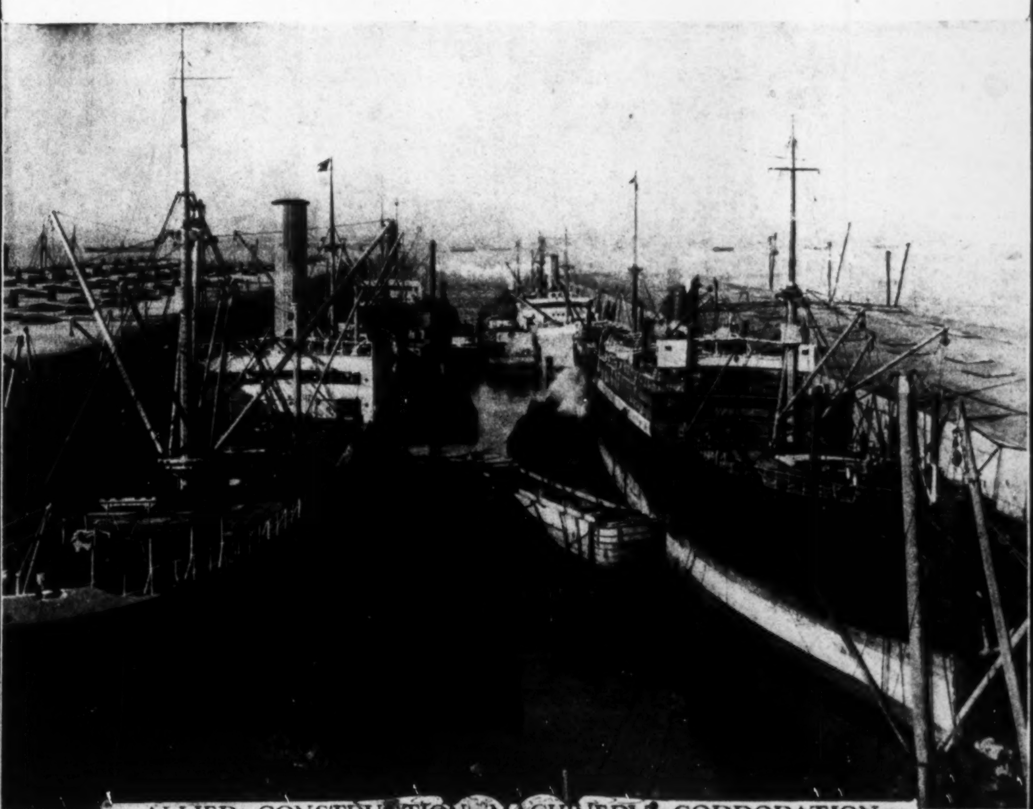
COOPERATIVE SERVICE TO THE EXPORT BUYER

THE ALLIED CONSTRUCTION MACHINERY CORPORATION was formed by the American International Corporation and a group of non-competing American manufacturers of construction machinery.

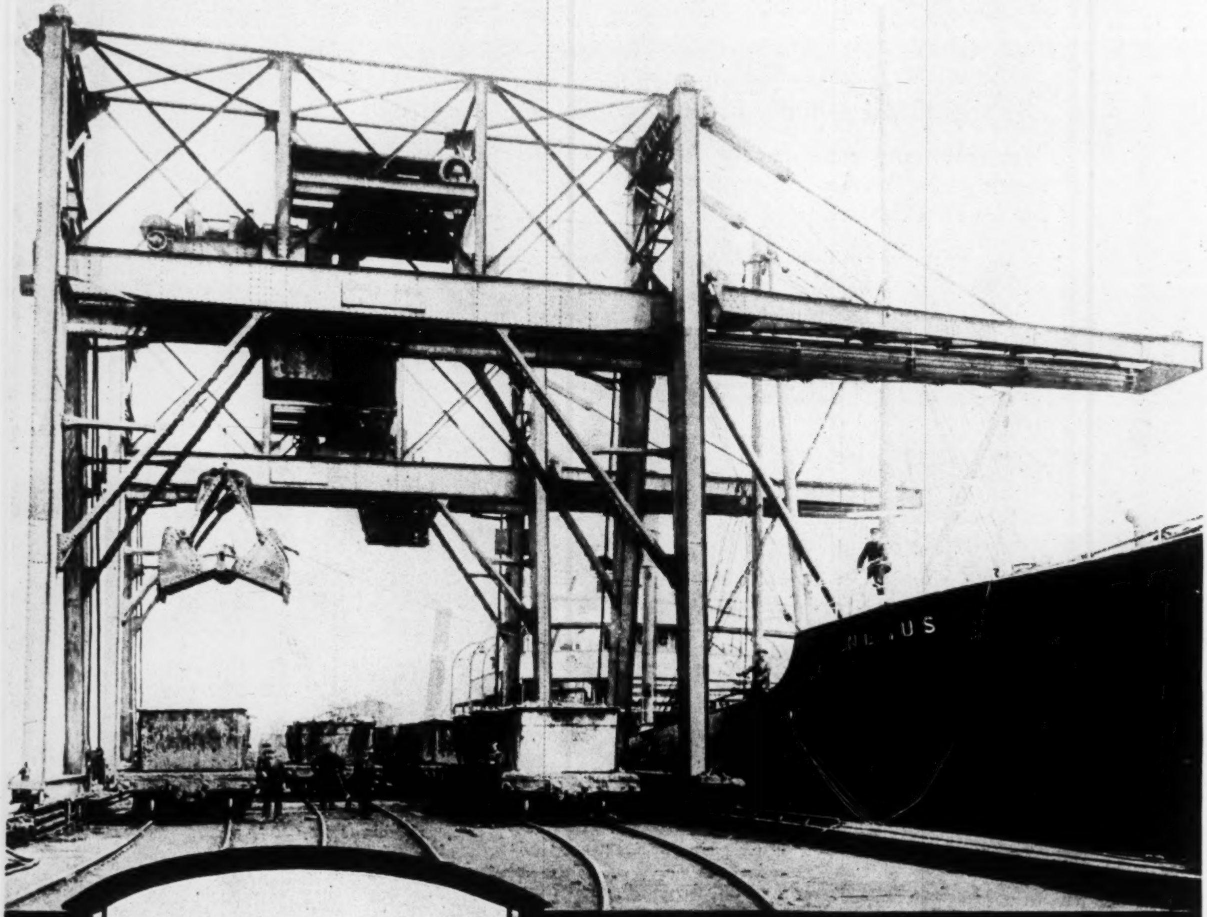
The buyer for export can secure from this single organization a complete line of contractors' plant and equipment—backed by undivided responsibility for shipments and guarantees.

The following manufacturers have joined this cooperative plan of serving the buyer for export to all countries outside of the United States and Canada:

The Lakewood Engineering Company, Cleveland, Ohio
The Thew Automatic Shovel Company, Lorain, Ohio
The Parsons Company, Newton, Iowa
The Hydraulic Pressed Steel Company, Cleveland, Ohio
(Concrete Form Department)
The Austin Manufacturing Company, Chicago, Ill.
The Western Wheeled Scraper Company, Aurora, Illinois
For France, Spain, Italy, Portugal, Belgium and their colonies; the West Indies and China



ALLIED CONSTRUCTION MACHINERY CORPORATION
Under the management and direction of the AMERICAN INTERNATIONAL CORPORATION
120 Broadway New York, U.S.A.



LAKEWOOD Clam Shell Bucket equipped with extra counterweights unloading asphalt from boats for The Barber Asphalt Paving Company, Manver, N. J.

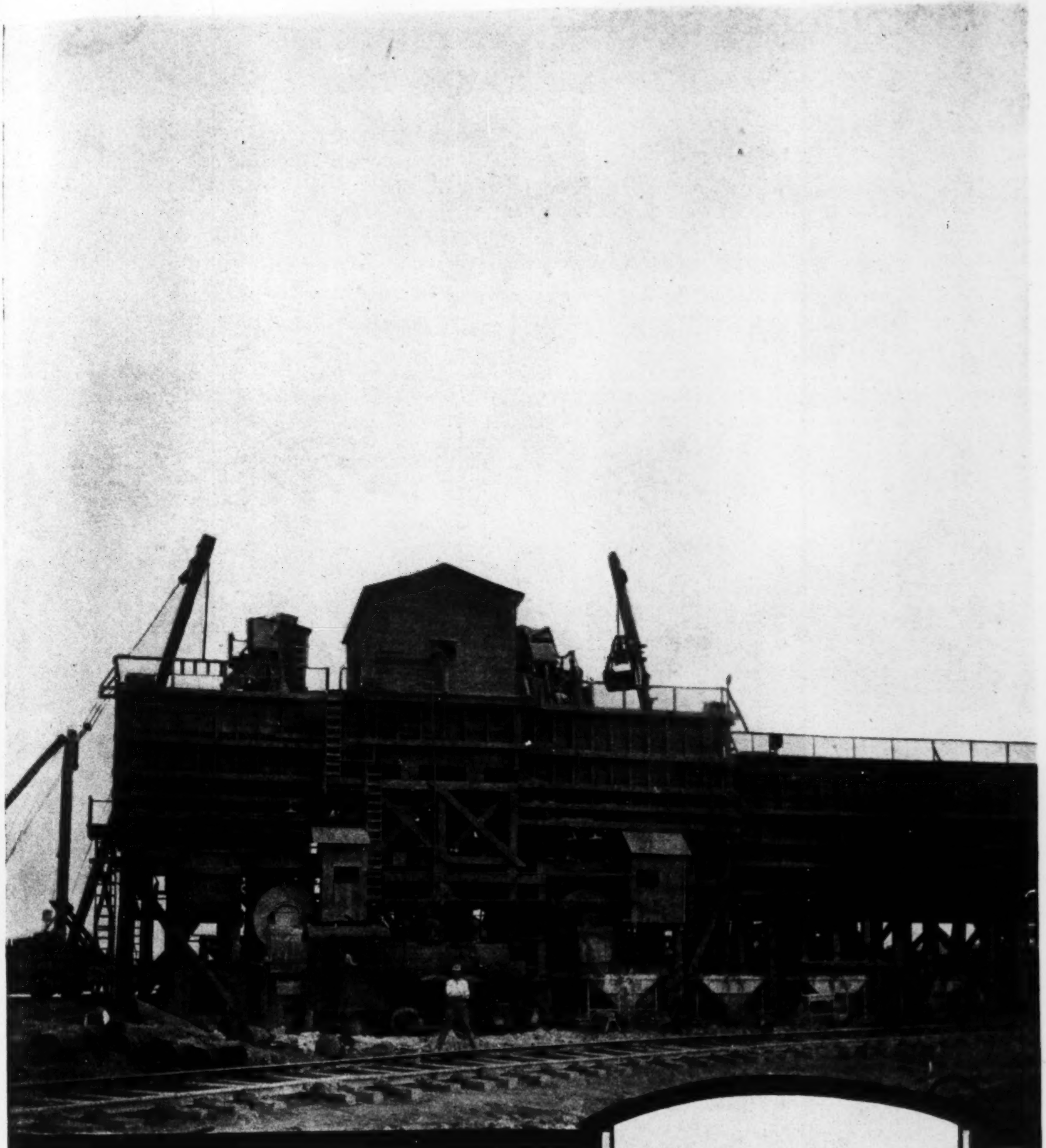
LAKEWOOD
INDUSTRIAL EQUIPMENT

Link up with Lakewood

LAKEWOOD
BUILT TO LAST

Lakewood Engineering Co. Cleveland

Sales outside of the United States and Canada handled through the ALLIED CONSTRUCTION MACHINERY CORPORATION, New York, U.S.A.



PORTSMOUTH Navy Yard —Dry Dock No. 4. The Geo. Leary Construction Company, Contractors.

Two No. 56 Lakewood Mixers, One No. 14 Lakewood Mixer, Two Lakewood Clam Shell Buckets, 18-60 ft. Radial gate hopper cars and 3000 feet Type L Concrete Chute.

LAKEWOOD
CONSTRUCTION EQUIPMENT

Link up with Lakewood

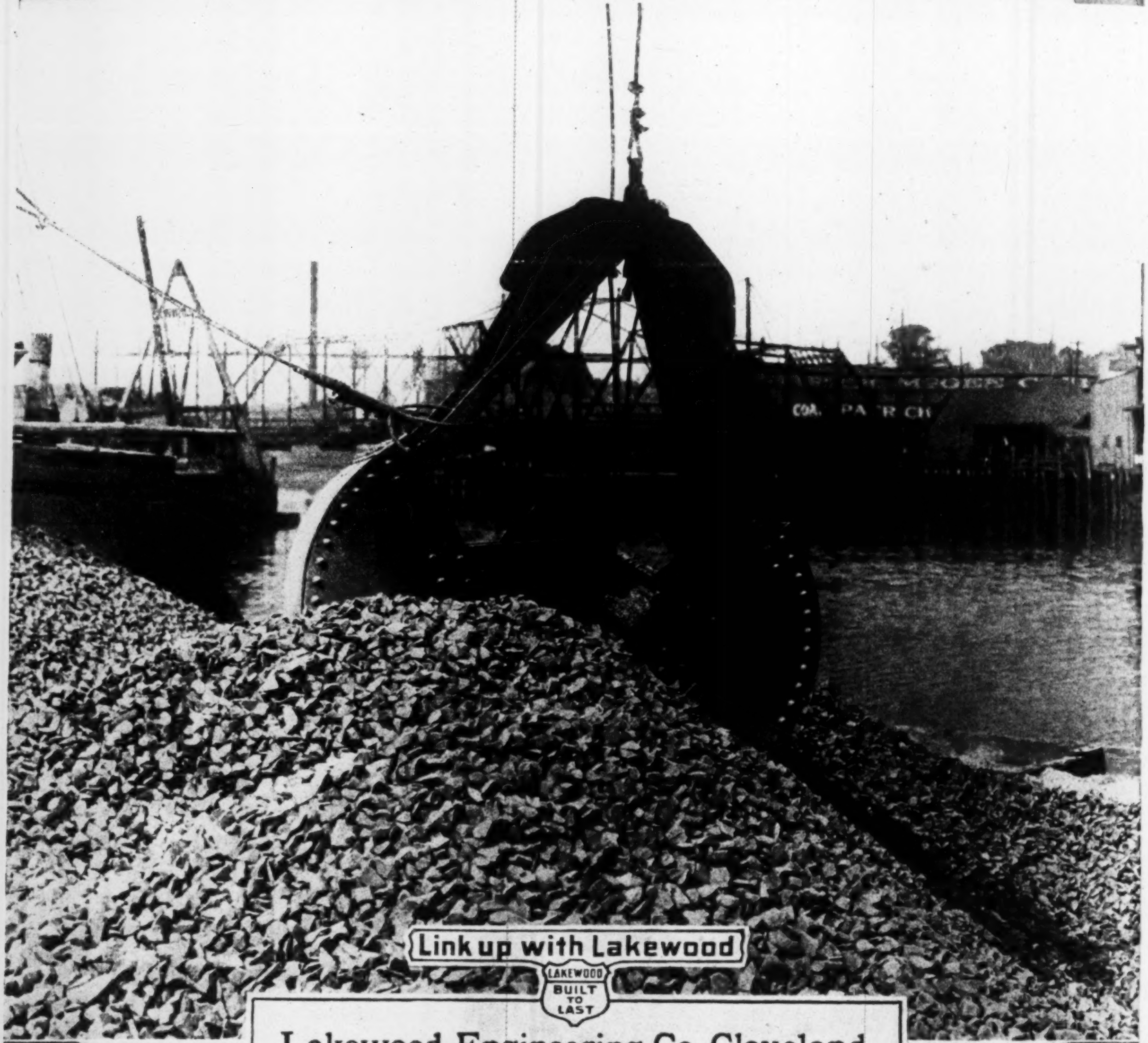
LAKEWOOD BUILT TO LAST

Lakewood Engineering Co. Cleveland

Sales outside of the United States and Canada handled through the ALLIED CONSTRUCTION MACHINERY CORPORATION, New York, U.S.A.

LAKEWOOD INDUSTRIAL EQUIPMENT

LAKEWOOD CLAM SHELL BUCKET
1 yard capacity handling crushed stone at docks
TOOLE & SUNDERLIN CO., Bridgeport, Conn.
Contractors



Link up with Lakewood

LAKEWOOD
BUILT TO LAST

Lakewood Engineering Co. Cleveland

Sales outside of the United States and Canada handled through the
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LAKEWOOD
CONTRACTORS EQUIPMENT

MIXING & DISTRIBUTING PLANT
Market St. Bridge, Chattanooga, Tenn.
VANG CONSTRUCTION CO. Cumberland, Md.
Contractors

Link up with Lakewood

LAKEWOOD
BUILT TO LAST

Lakewood Engineering Co. Cleveland

Sales outside of the United States and Canada handled through the
ALLIED CONSTRUCTION MACHINERY CORPORATION, New York, U.S.A.

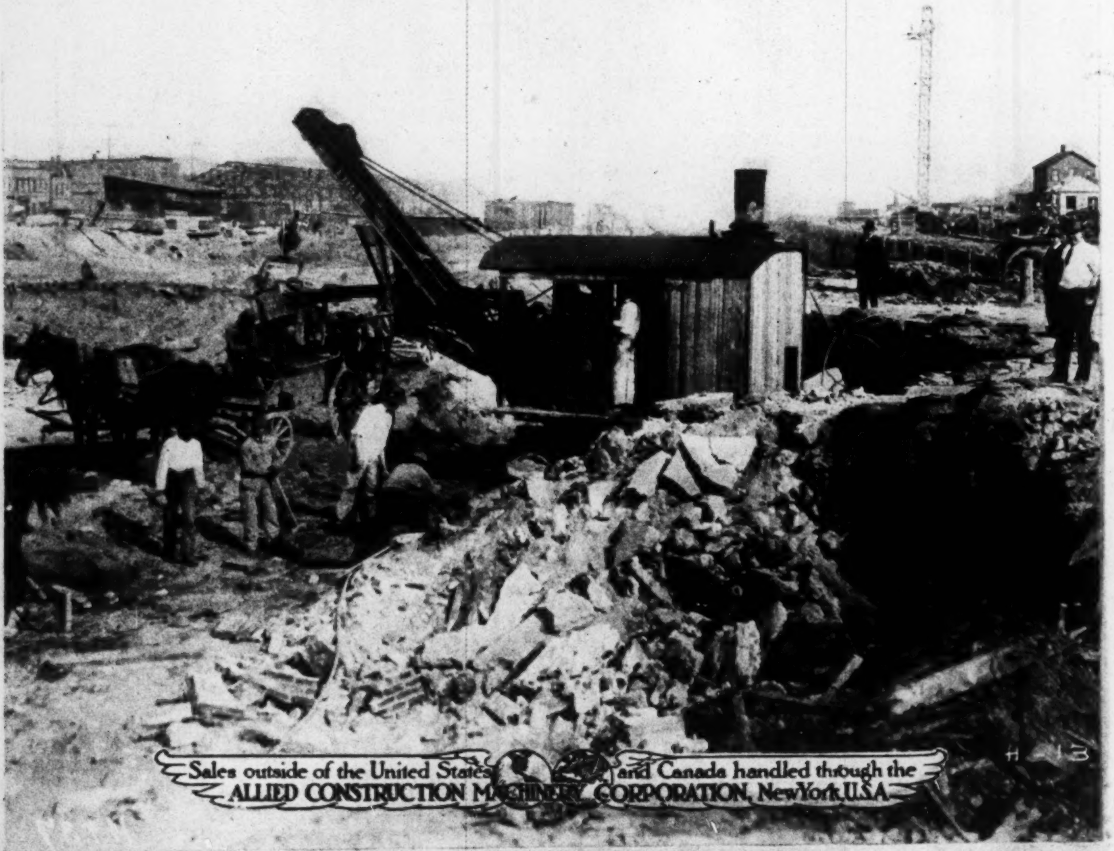
RUGGED STRENGTH of the THEW

make it possible to perform the heavy work shown below. Type A-O equipped with ⅝-yard dipper, taking out 300 cubic yards of dirt a day on the site of the New Cleveland & Youngstown Freight Terminal in Chicago. The Walsh Construction Co. of that city, Contractors.

Thews are Everywhere

FULL CIRCLE SWING
THEW
HORIZONTAL CROWDING MOTOR
STEAM SHOVELS

The Thew Automatic Shovel Co.
Lorain, Ohio
New York Office, 30 Church St.



Sales outside of the United States and Canada handled through the ALLIED CONSTRUCTION MACHINERY CORPORATION, New York, U.S.A.

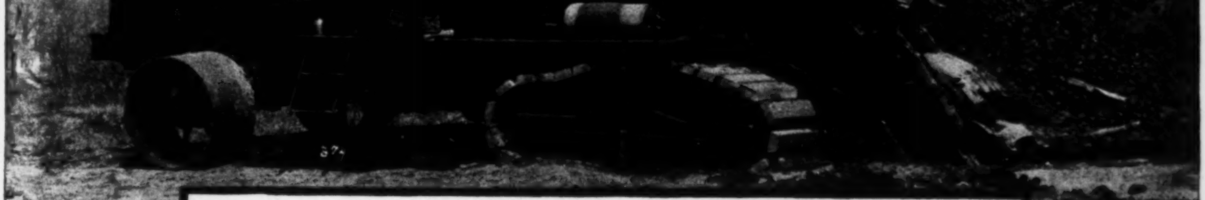
One Man does it NOW—

Scarcity of labor is no longer a factor in the progress of underground improvements.

In digging trenches of any size, one man operating either the steam or gasoline-driven "Parsons" is the logical way.

Let us know the type of your work We will be glad to give you complete information about the "Parsons" best fitted to your needs. Ask us about Backfillers.

PARSONS



THE PARSONS COMPANY, 210 Second St., Newton, Ia.

Eastern Office: 18 W. 34th St., New York.

Sales outside of the United States and Canada handled through the ALLIED CONSTRUCTION MACHINERY CORPORATION, New York, U.S.A.

"Hydraulic"

Sewer and Tunnel Forms

meet the demand for speed. Furnished for any curvature or combination of curves and tangents.

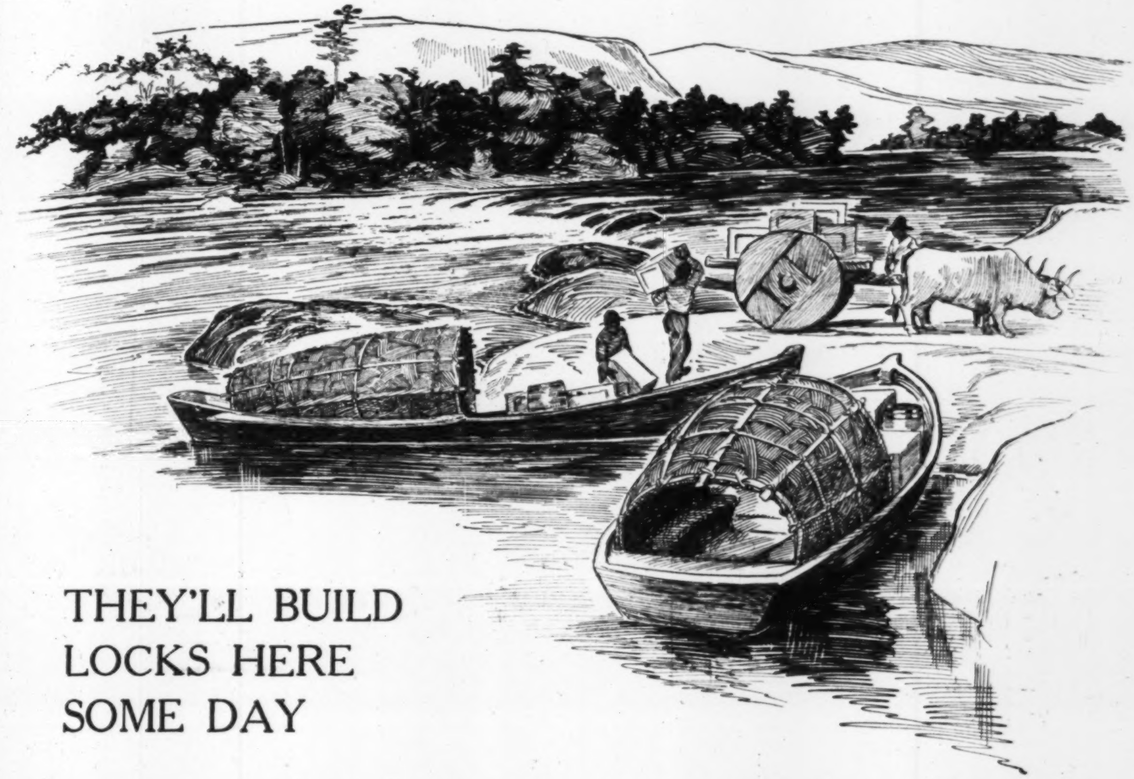
Lack of carpenters and skilled laborers, the soaring lumber prices cannot slacken the speed of the contractor who uses "Hydraulic" standardized forms.

For clean concrete work with only a handy man and three huskies to place your HYDRAULIC PRESSED STEEL FORMS. Write us.

The Hydraulic Pressed Steel Co.
CLEVELAND OHIO

Chicago Office: Fisher Bldg., 342 Dearborn St., New York Office: Singer Bldg., 149 Broadway

Sales outside of the United States and Canada handled through the
ALLIED CONSTRUCTION MACHINERY CORPORATION, New York U.S.A.



THEY'LL BUILD LOCKS HERE SOME DAY

The rivers of Brazil offer the most remarkable example of a natural transport system, with main trunk lines and feeders, that is present in any country. With one tenth the expenditure that we make on our rivers and harbors they can open up the headwaters of these streams to steam navigation and bring out to the world the immensely valuable products of the great central plateau. And they will do it, too, because this is the land of greatest potentiality. It has every natural resource that we possess and others that we can never have.

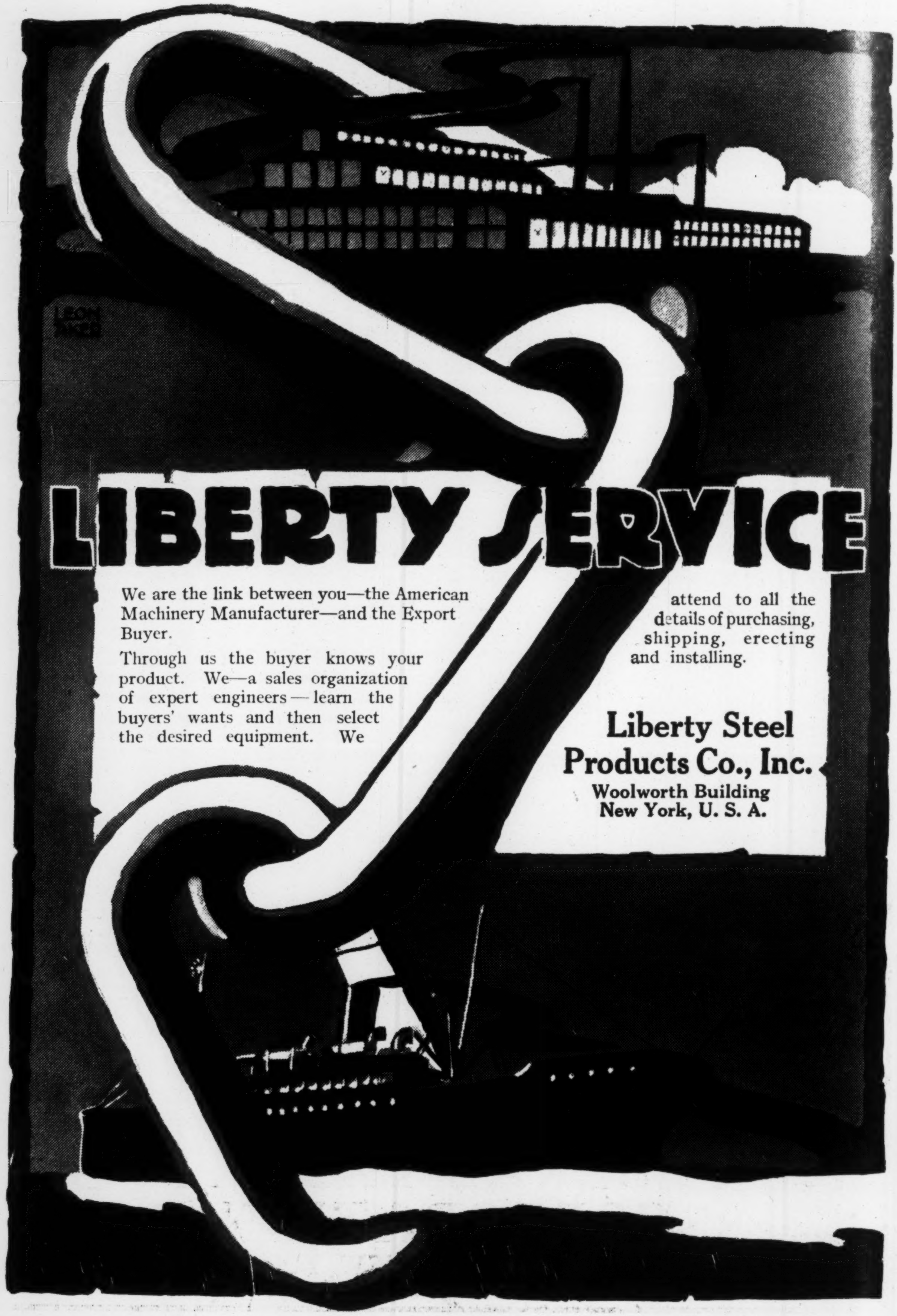
American engineers and manufacturers, backed by American dollars and guided by American traders, will play a great part in the development of these resources. But choose carefully your exporting house—it must be in position to supply all that you lack to accomplish success in foreign fields. The combination should want nothing to insure permanent results and uphold American prestige overseas.

The Federal Export Corporation is equipped to sell your services or your machinery, transport the latter, and finance transactions to any amount either by underwriting the bonds or taking the equivalent in products of the land.

We will be glad to explain how Fedex services can be applied to meet requirements.

FEDERAL EXPORT CORPORATION

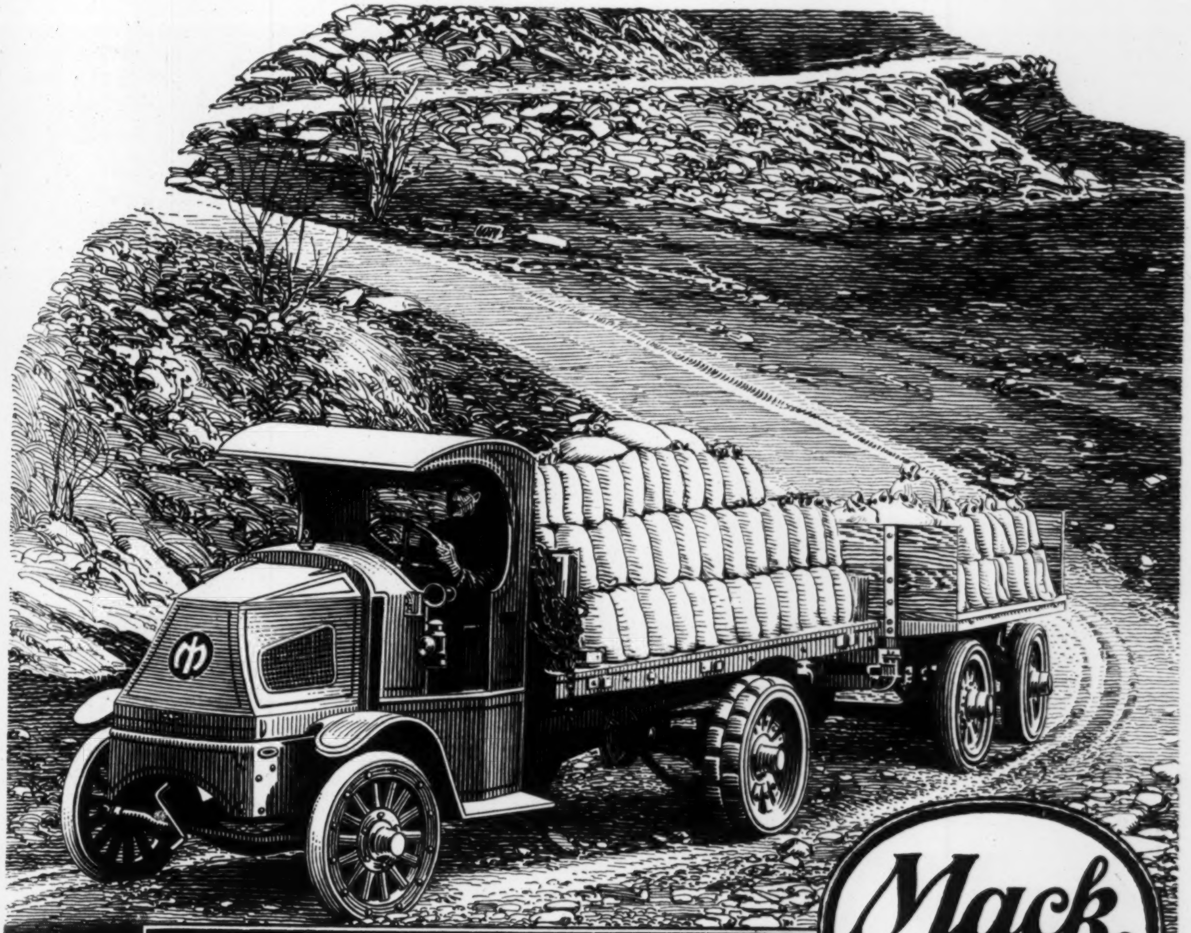
115 BROADWAY, NEW YORK



We are the link between you—the American Machinery Manufacturer—and the Export Buyer.

Through us the buyer knows your product. We—a sales organization of expert engineers—learn the buyers' wants and then select the desired equipment. We attend to all the details of purchasing, shipping, erecting and installing.

Liberty Steel Products Co., Inc.
Woolworth Building
New York, U. S. A.



Mack
TRUCKS

10,000 MILES

NOT A DOLLAR for REPAIRS

Mr. Hugh G. Williams mines and manufactures roofing slate in Granville, N. Y. His hauling problem presents the difficulties of heavy cargo, rough and hilly roads, a short haul—enough to test the metal of any truck.

A year ago he bought a 3½ ton MACK Truck. After it had traveled 10,000 miles Mr. Williams wrote:

> "This truck has been in actual service every day except Sundays, a total mileage of about ten thousand miles. The main feature in which this truck excels is the power which it develops. We used this truck in connection with three five-ton trailers and have hauled nine tons of product on the trailer, the trailer itself weighing about 5500 lb., making a total of 11.75 ton, which I consider remarkable for a three ton truck to do. The distance we haul that load is one and one half miles to the railroad and we are drawing from 80 to 100 tons per day. Up to date we have not spent a dollar for any parts outside of tires and driving chains."

That is MACK performance.

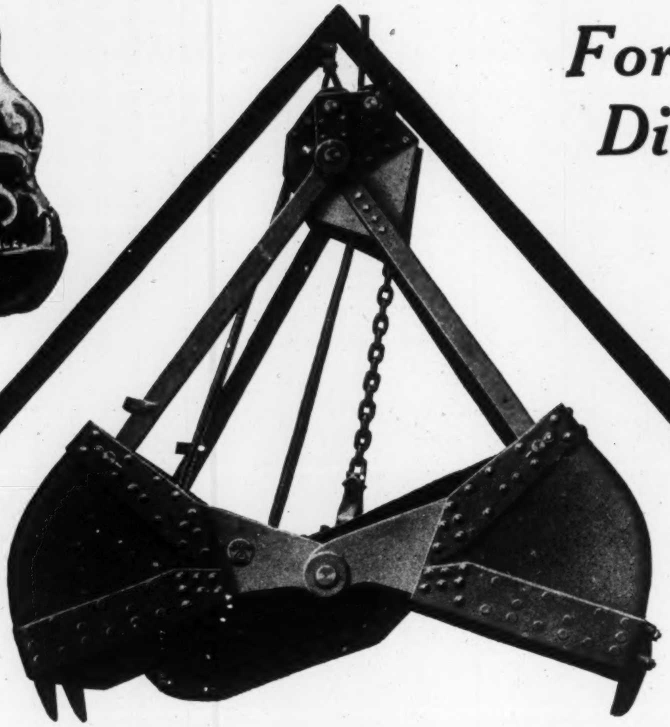
MACK Trucks are made in sizes from 1 to 7½ tons capacity. Special Bodies for individual needs. Write for facts and figures in Bulletin No. 5.

INTERNATIONAL MOTOR COMPANY
NEW YORK

Performance Counts

The "BLAW" BULLDOG

For Tough Digging!



Look at that long lever arm and its reeving (with 5 parts of line) and you see where the **"BLAW" BULLDOG** gets its great closing power.

It is a bucket designed for the toughest kind of digging which it is practical to handle with a clamshell bucket—in excavating trenches or foundations, heavy dredging or rehandling hard material.

Where you strike lighter work you can reeve the **"BLAW" BULLDOG** with 3 parts of line, for faster handling. See its sturdy construction —heavy reinforcing and riveting, rigid headblock that keeps the alignment perfect. Grease plugs are used in place of cups. All the interesting details of its construction are covered by the **"BLAW" BULLDOG** Folder. **Send the coupon for your copy.**

BLAW-KNOX COMPANY, 601 Farmers Bank Bldg., Pittsburgh, Penna.

Please send me a copy of the "BLAW" BULLDOG Folder.

Company.......................................

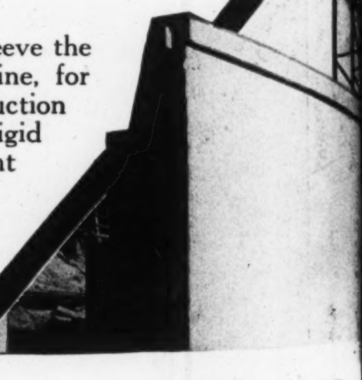
Individual.......................................

Street.......................................

City.......................................

State.......................................

E.N.-R.



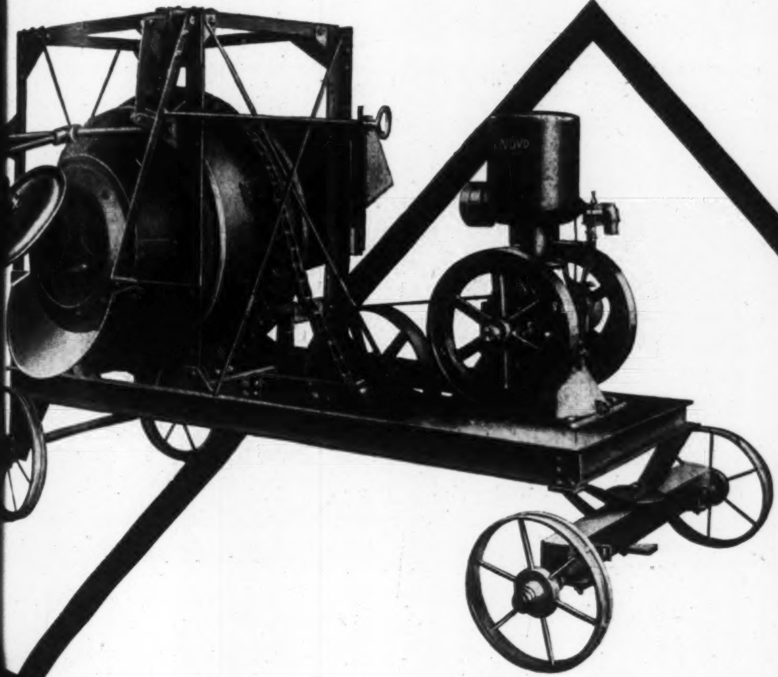
"BLAWFORMS" For

BLAW-KNOX

601 Farmers Bank Bldg.,

NEW YORK SAN

The "BLAW-RANSOMIXER"



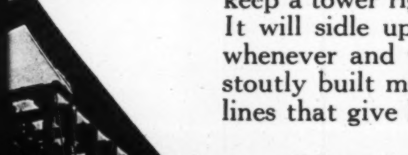
Handles ALL Your Jobs!

One mixer to cover the widest range of work—is the modern way of contracting. The **"BLAW-RANSOMIXER"** will keep a tower rig busy delivering 10 cu. yd. an hour or better. It will sidle up to a sewer trench and spout concrete down whenever and **wherever** needed. It is a compact, portable, stoutly built mixer of 10 cu. ft. capacity designed along **new** lines that give high capacity per hour.

Primarily this is accomplished by the cone-shaped drum ends, narrow concentrated mixing zone, and the peculiar shape of the **THREE** broad mixing blades. These unite to give an extra-thorough mixing and a rapid, clean discharge.

The complete interesting data is given in the **"BLAW-RANSOMIXER"** Booklet.

Send the coupon for your copy.



Concrete Construction

COMPANY

PITTSBURGH, PENNA.

FRANCISCO CHICAGO

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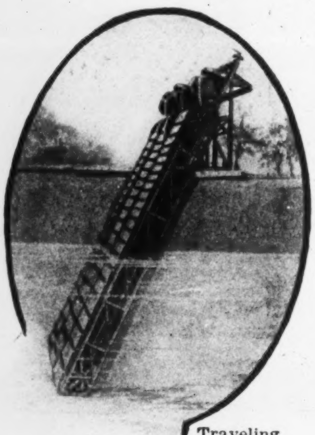
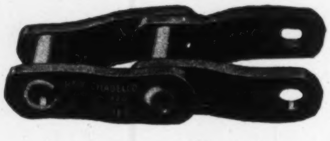
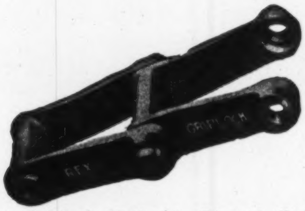


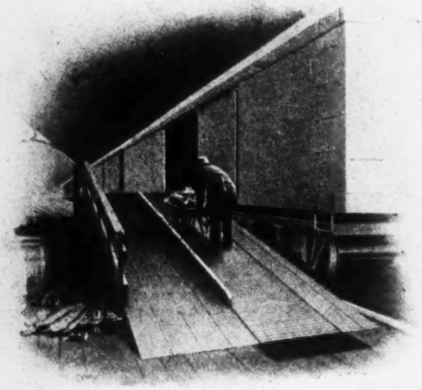
Traveling Water Screens



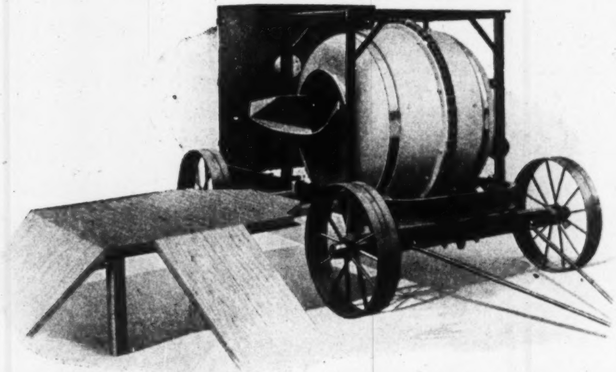
Rex Chabelco Steel Chain



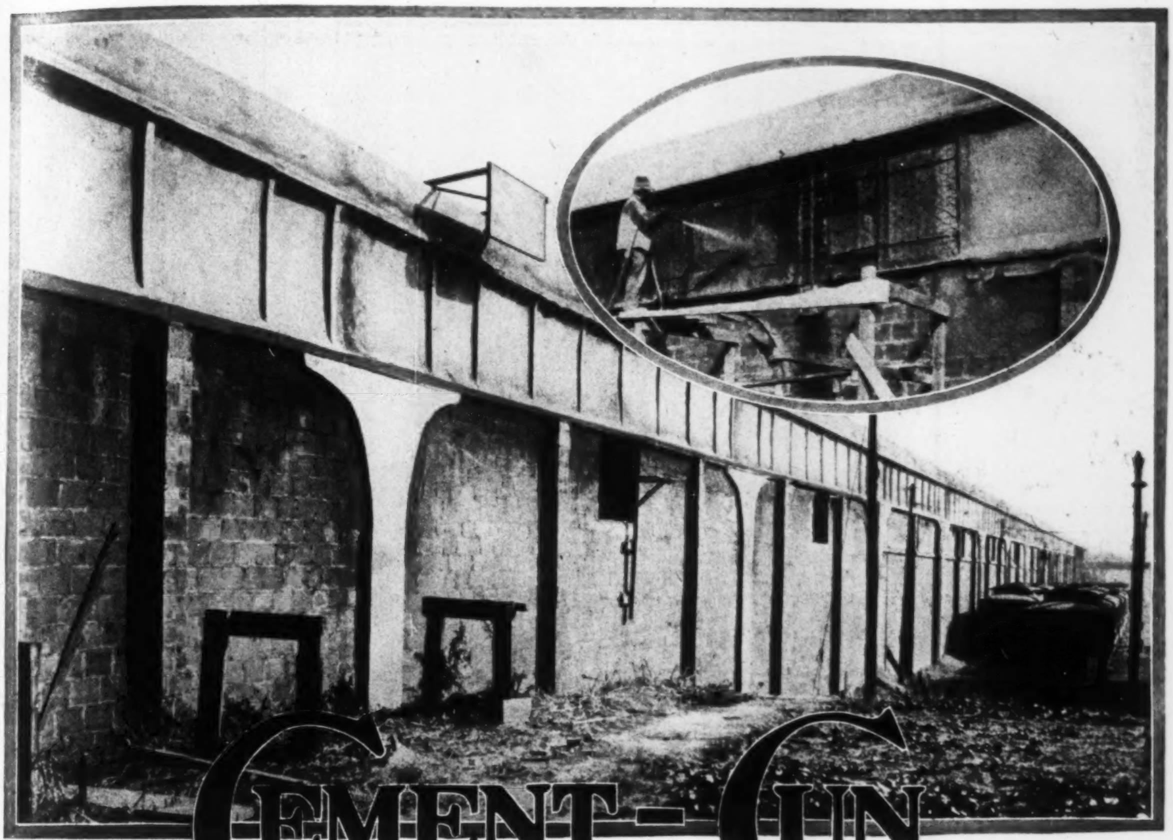
Rex Griplock Malleable Riveted Chain



Escalator for loading castings into Freight Cars



7-S Rex Mixer, complete with Novo Engine and Loading Platform



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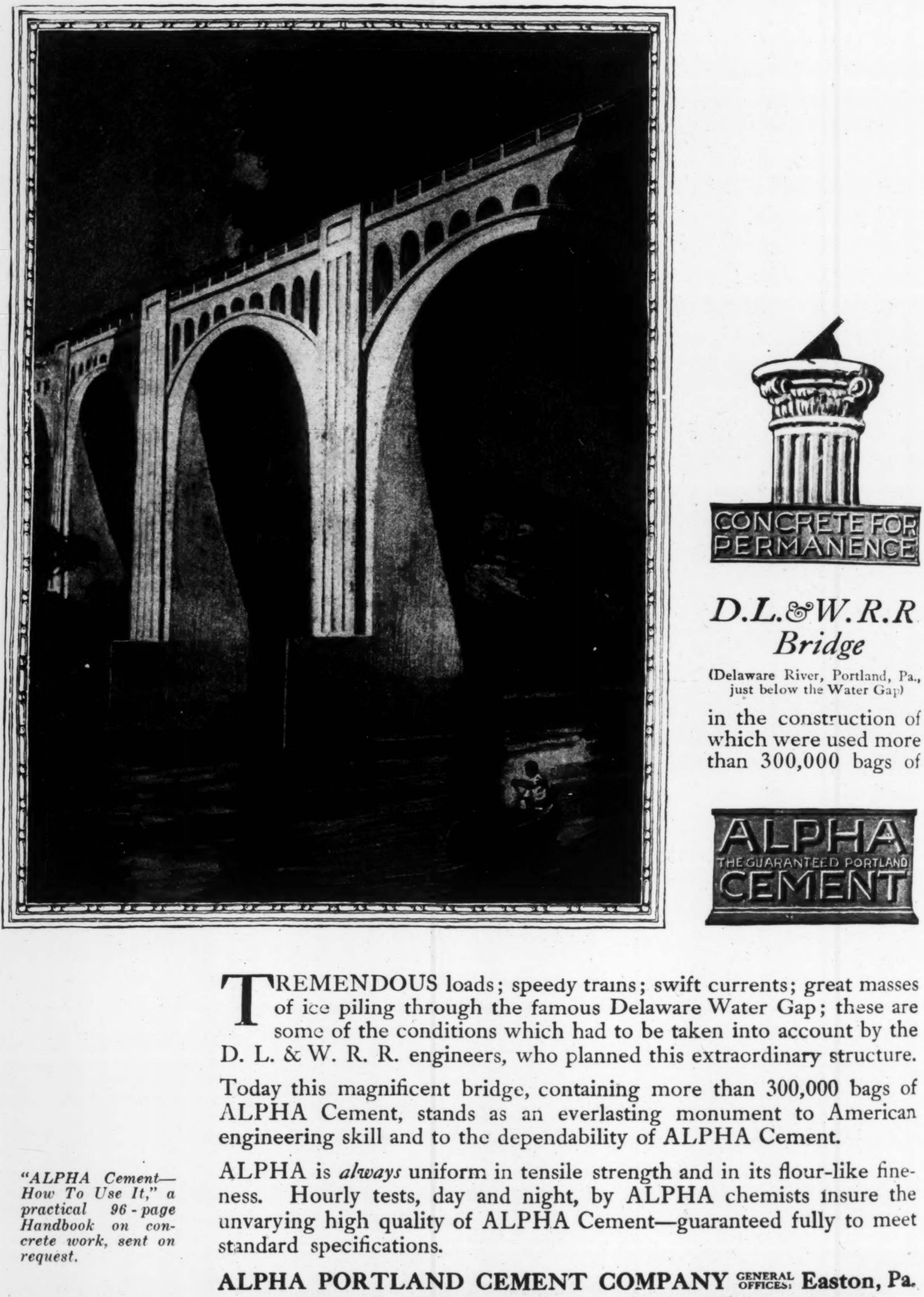
The Cement-Gun can be purchased outright from us and used by anyone. It is not a restricted article.



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D.L.&W.R.R Bridge

(Delaware River, Portland, Pa., just below the Water Gap)

in the construction of which were used more than 300,000 bags of

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TREMENDOUS loads; speedy trains; swift currents; great masses of ice piling through the famous Delaware Water Gap; these are some of the conditions which had to be taken into account by the D. L. & W. R. R. engineers, who planned this extraordinary structure.

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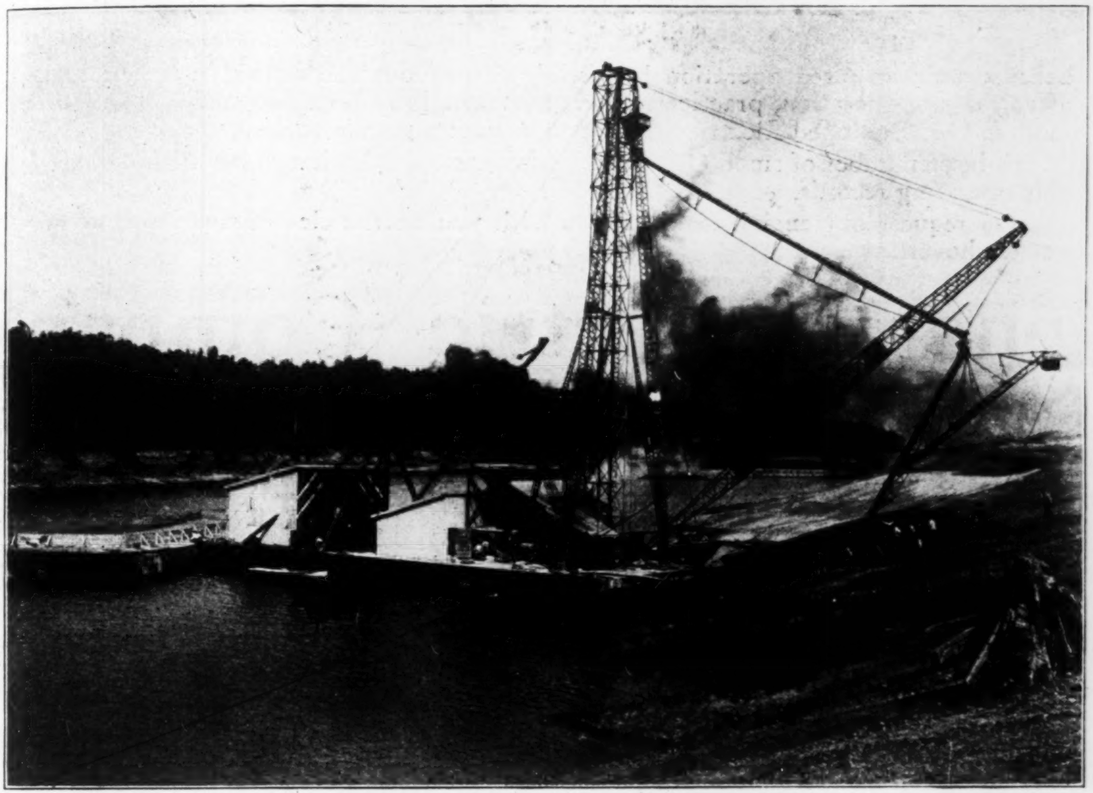

Floating Gravity Plant placing concrete revetment on banks of Mississippi River. Equipment designed and manufactured by the Insley Mfg. Co., for the United States Engineer Office, Vicksburg, Miss.

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Where conditions are such that portable equipment can be employed, its use is highly recommended. With it minimum placement costs are obtained with a low plant expenditure.

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*Southwest General Electric Company †General Electric Company of Michigan.
For Canadian Business refer to Canadian General Electric Company, Ltd., Toronto, Ont.
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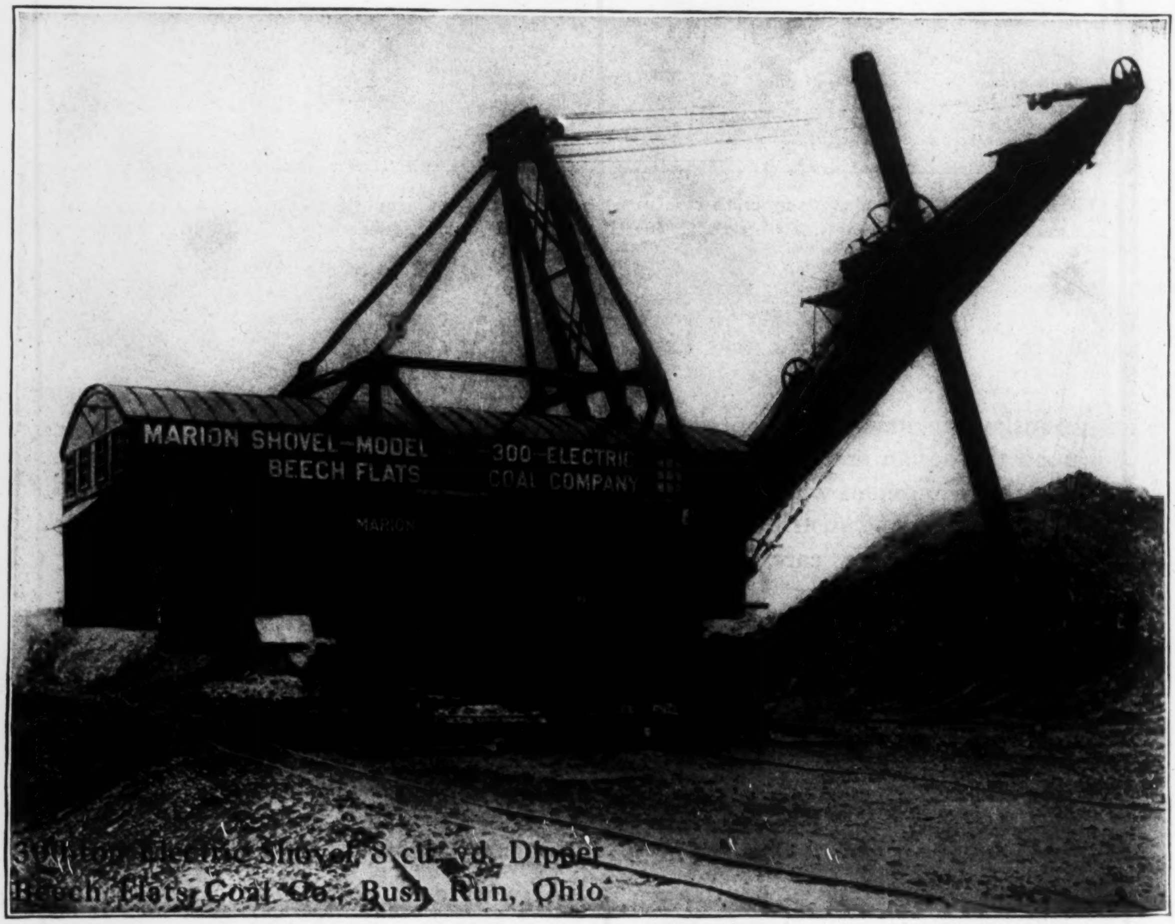

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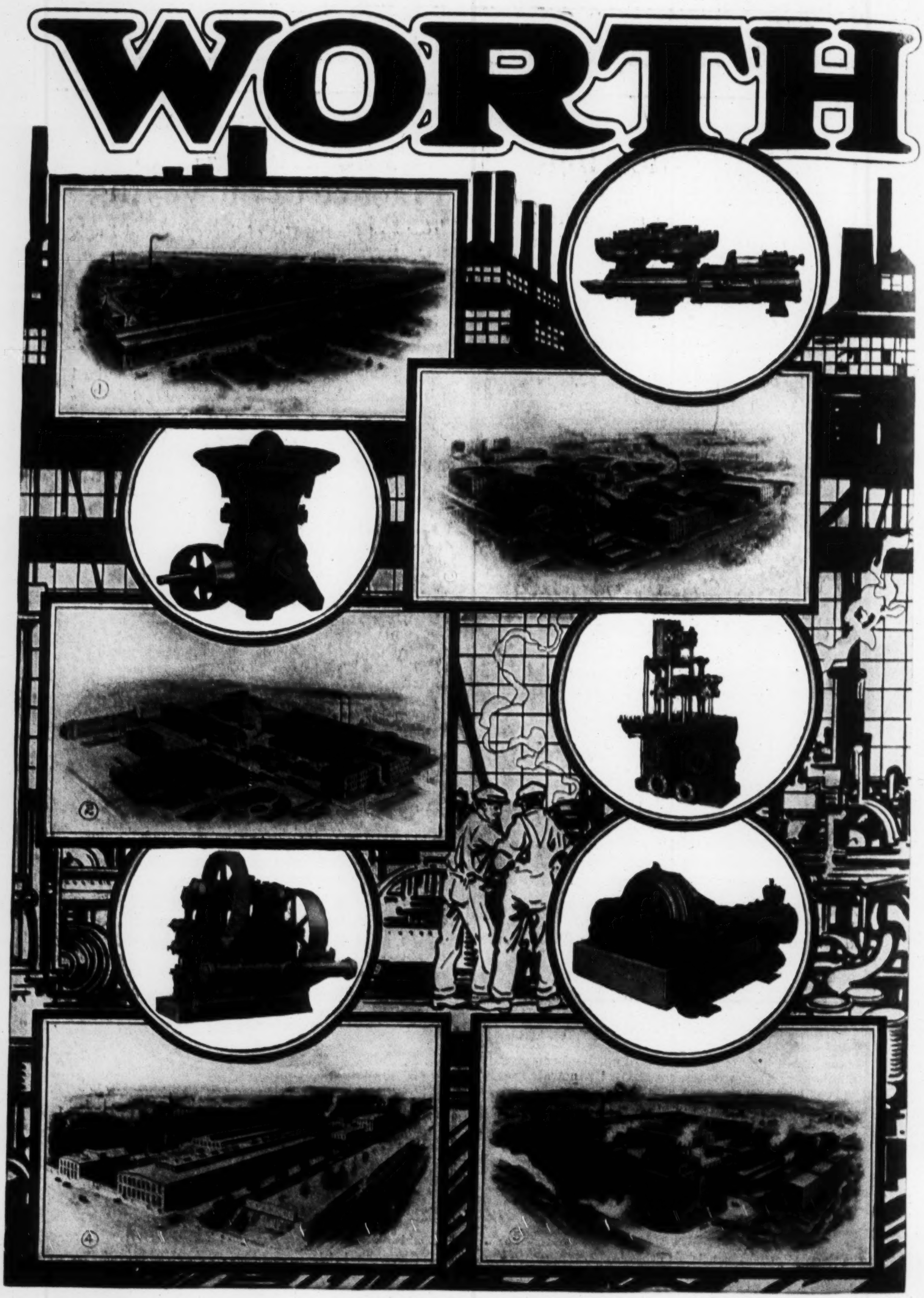
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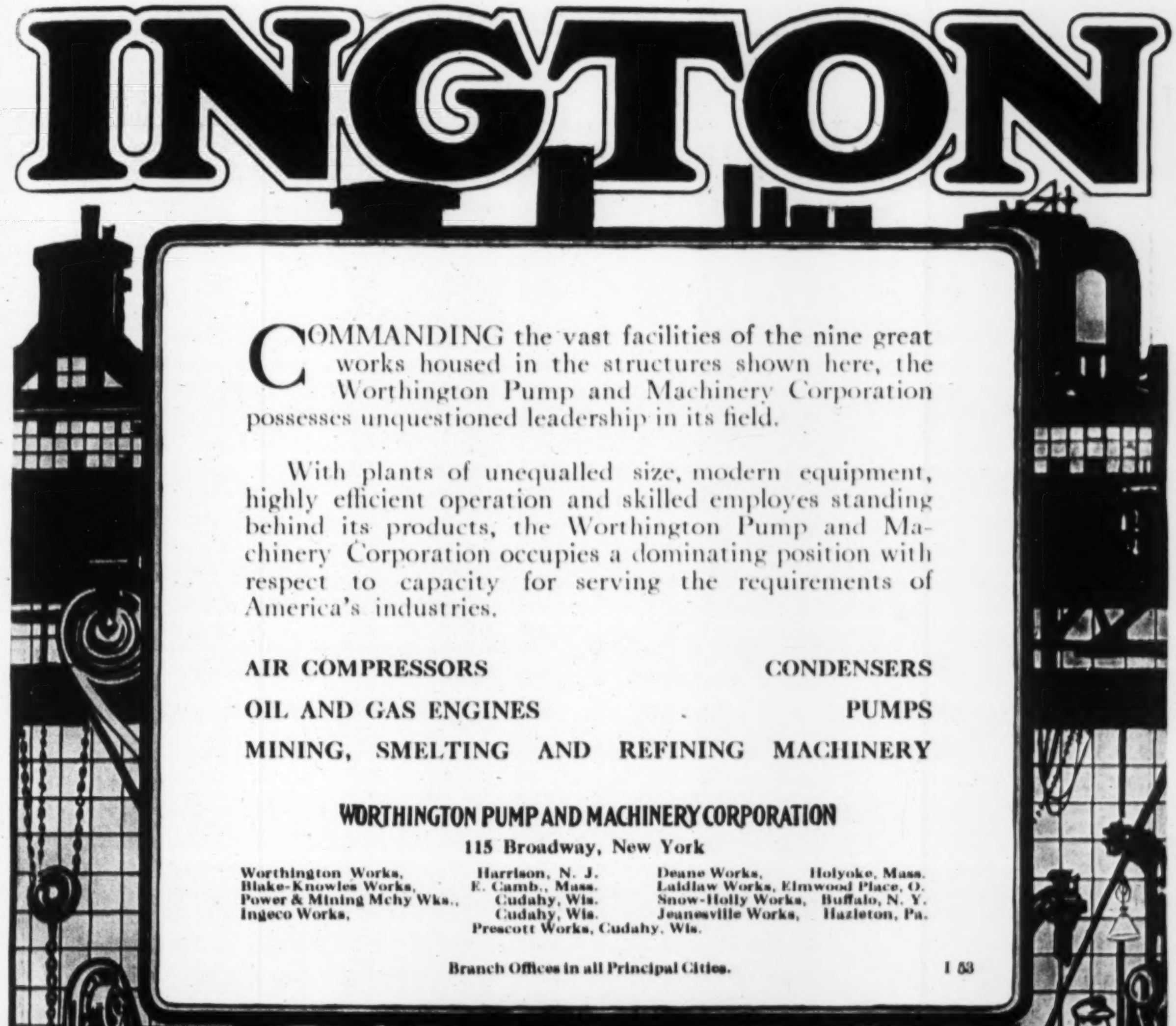

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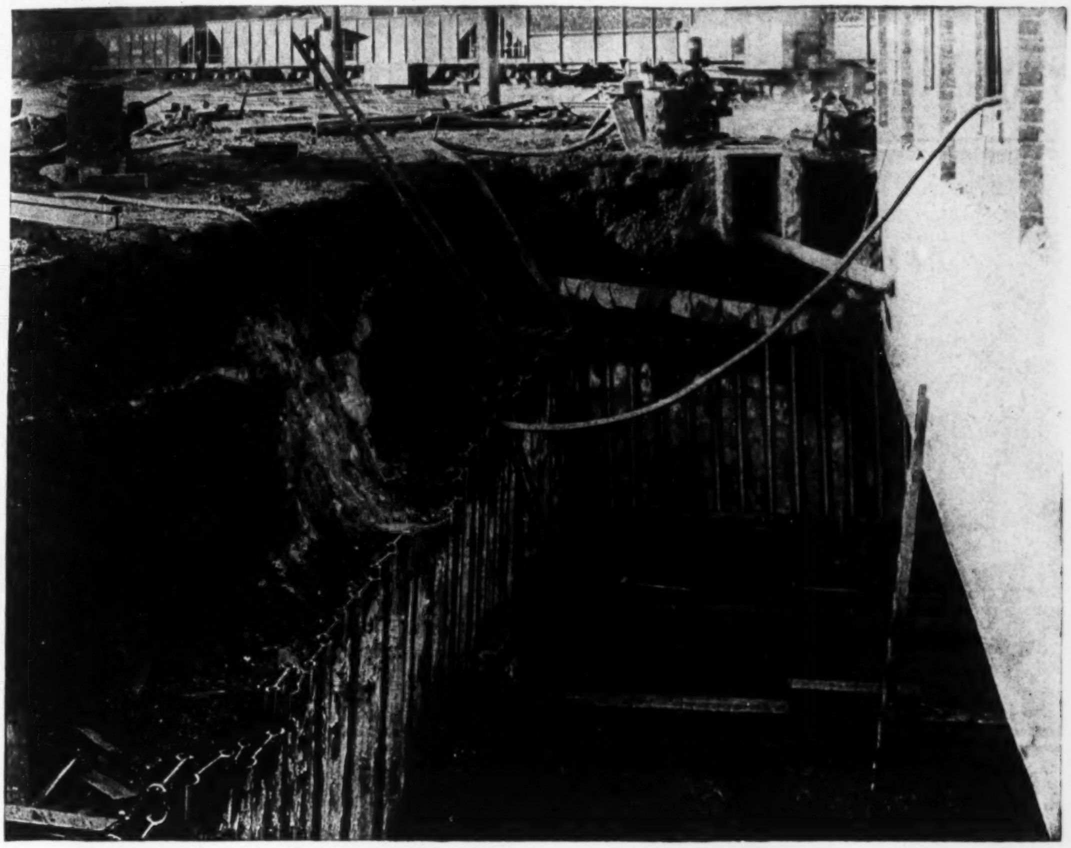

Lackawanna Steel Sheet Piling Cofferdam for Building an Addition to the Screen House Well, The Solvay Process Company, Detroit, Mich.

The excavation here is in a soft place—about eight feet of filled ground and below that, quicksand and soft clay.

The success of a previous installation of Lackawanna Steel Sheet Piling in keeping out water and otherwise facilitating foundation work on the main building, influenced the Superintendent of Construction, Mr. Chas. H. Brodt, to resort to the use of this material again for the extension and for a trench in which a concrete pipe was placed at a depth of 20 feet. Accordingly, the above cofferdam was driven with 24-foot lengths of the Lackawanna Straight-Web Section. A No. 2 Warrington Hammer was used for the driving, and as the sheet piling sections were too short to go the whole depth, they were driven with a follower until their tops were about eight feet below the surface.

This Lackawanna Sheet Piling did its work well, has been pulled for reuse and as we are told, was found very satisfactory.

If you expect to do any foundation or trench work in treacherous or obstinate soil, let our steel sheet piling engineers suggest proper procedure. Their advice is free.

Have you our book, "Lackawanna Steel Sheet Piling?"

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Mention of a few of the vast quantities of materials hauled by a fleet of over one hundred Whites at Camp Funston and Fort Riley, Kansas, gives some idea of the scope of the work. The following represent freight car loads:

47 cars of nails
58 cars of sashes and doors
74 cars of wall board
60 cars of electrical supplies
657 cars of crushed rock
182 cars of sewer pipe
120 cars of brick
43 cars of boilers
41 cars of refrigerators
97 cars of roofing materials
142 cars of plumbing materials
52 cars of radiators
201 cars of cement
185 cars of water pipe
65 cars of gravel
23 cars of furnaces and stoves
12 cars of office supplies
571 cars of miscellaneous material

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SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until January 19, 1918.

Sanitary Sewers

OFFICIAL NOTICE NO. 4

Published by the authority of the Sewerage Commission of Hagerstown, Md.

Sealed proposals for building Main and Lateral Sanitary Sewers in certain Streets, Alleys and Rights of Way, secured and to be secured in the City of Hagerstown, will be received at the Office of the Sewerage Commission in the Police Headquarters Building until 7.30 P.M. January 19th, 1918, at which time and place, during the session of the said Commission, the Bids will be publicly opened and read.

The work to be done embraces the building of approximately 22,000 lineal feet of Sanitary Sewers ranging in size from 8 to 22 inches in diameter with all Manholes, Foundations and Appurtenances, also 19,000 lineal feet of House Connections 6 inches in diameter with all necessary appurtenances.

On and after December 21, 1917, Specifications, Blank Forms of Proposals can be obtained, and detailed Plans examined at the Office of the Sewerage Commission, and full sets of Plans will be sent to any Contractor on the receipt of $10.00, the sum to be returned upon the surrender of the Plans in good condition within 30 days from the date of award.

The Sewerage Commission of the City of Hagerstown reserves the right to reject any and all Bids.

Signed
E. LeROY HEARD, Secretary.
Countersigned
JOHN CARMICHAEL, Chairman.

Bids received until Jan. 9, 1918.

Fire Protection System, etc.

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans, at their office, Suite 200, New Orleans Court Building, until January 9, 1918, at 11 o'clock A.M., and then publicly opened, for furnishing and installing a complete fire protection and sprinkler system, including motor driven centrifugal underwriters' pumps and complete electrical installation for same, for portions of the Cotton Warehouses and Terminal now under construction for the Board of Commissioners of the Port of New Orleans on the east bank of the Mississippi River between Valence and Soniat Streets.

A deposit of Two Thousand Dollars ($2,000.00) in cash or certified check is required with proposal. Bond with contract Twenty Thousand Dollars ($20,000.00).

On and after December 22, 1917, plans and specifications will be on file at the office of Ford, Bacon & Davis, No. 921 Canal Street, New Orleans, La., by whom full sets will be furnished to prospective bidders on a deposit of Twenty-five Dollars ($25.00), which will be refunded to all bidders who submit proposals and return sets in good condition to the Engineers. To those who do not submit proposals Fifteen Dollars ($15.00) will be refunded upon return of sets as above.

The right is reserved to reject any and all bids and to waive informalities.

(Signed) W. B. THOMPSON,
President.

Official Proposals

Price, $3.60 an inch—Copy can be received until Wednesday, 10 a.m., for issue mailed the next day.

PROPOSALS

Bids received until February 11, 1918.

Arlington Docks

Mobile, Ala.

Sealed bids are asked for the furnishing of materials, the driving of piles and the construction of bulkheads and wharf, in the Bay of Mobile at the Arlington Dock site, in accordance with plans and specifications on file in the office of the city engineer at the City Hall, Mobile, Ala., covering the furnishing and driving of approximately Two hundred and seventy-two thousand five hundred lineal feet of round Long Leaf Yellow Pine piling, varying in length from twenty feet to fifty-five feet; the furnishing and placing of approximately Seven thousand two hundred lineal feet, measured along the top of the bulkhead, double row of four-inch sheet piling; and approximately Eight thousand lineal feet of bulkhead, single row of four-inch sheet piling, —aggregating of sheet piling Two million six hundred and twenty-four thousand feet board measure, and of timbers for framing wharf apron and for completion of the above construction, approximately Nine hundred and eleven thousand nine hundred lineal feet board measure, and of One and one-quarter inch wrought iron anchor rods, in place, aggregating Twenty-one thousand six hundred lineal feet.—bids to be made upon printed form of specifications furnished by the City Engineer, on application, and deposit of Three dollars to cover cost of same and plans.

Sealed bids will be received up to 12 o'clock noon of the 11th day of February, 1918, at which time the same will be opened. All bids must be marked plainly on the outside of the envelope and across the seal, BID ON ARLINGTON DOCKS. Certified check for Five thousand dollars is required to accompany each bid.

The right is reserved to reject any and all bids.

HARRY PILLANS,
Commisisoner of Docks and Wharves.
WRIGHT SMITH,
City Engineer.
S. H. HENDRIX,
City Clerk.

Bids received until Jan. 5, 1918.

Levee Construction

Chamois, Mo.

Sealed proposals will be received up to One O'Clock, Jan. 5th, 1918, at the Office of the Secretary of the Board of Commissioners of the Shawnee Creek Drainage District in Chamois, Missouri, for the construction of 60,000 cubic yards of earth levee.

Plans, specifications, bidders' forms, amount of bidder's bond or check, bond for construction and all information needed for bidders can be had of the Engineer, H. E. Steinmann, Chamois, Mo. Legal advertisement in the News of Osage County, Chamois, Mo.

J. RICHARD GARSTANG,
Secretary.
Chamois, Mo.

PROPOSALS

Bids received until January 4, 1918.

Pipe Line, Etc.

GREATER WINNIPEG WATER DISTRICT

Winnipeg, Man., Can.

Sealed tenders will be received by the Commissioners of the Greater Winnipeg Water District up to noon on Monday, January 4, 1918, for each of the following contracts:

Contract 65: Construction of a Pressure Pipe Line from Red River to McPhillips Street Reservoir. Deposit of $20.00 required.

Contract 69: Manufacture and supply of 48-in. pre-moulded Reinforced-Concrete Pressure Pipe. Deposit of $10.00 required.

Contract 68: Supply of Cast-Iron Pipe and Specials. Deposit of $10.00 required.

Specifications and forms of tender may be obtained on application at the office of the District on and after November 7th, accompanied by a certified cheque for the amount of the deposit, which deposit will be returned on submission of tender or return of documents.

R. D. WAUGH,
Chairman of Commissioners.
501 Tribune Building,
Winnipeg, Man.,
October 30th, 1917.

The date for receiving tenders on the above has been extended by order of the Board to noon on Friday, January 4th, 1918.

Bids received until Feb. 5, 1918.

Water Main

Jersey City, N. J.

Sealed proposals will be received by the Board of Commissioners of Jersey City, Tuesday, February 5, 1918, at 2 p. m., in the Assembly Chamber, City Hall, Jersey City, for the construction of a water main under Hackensack and Passaic Rivers, in accordance with specifications on file in the office of the City Clerk.

Blank forms of bid, showing estimate of quantities and agreements of sureties, must be obtained at the office of the Chief Engineer, City Hall, Jersey City, N. J.

Proposals must be enclosed in sealed envelopes endorsed "Proposal for Water Main," addressed to this Board, and may be either mailed, delivered or handed to the City Clerk, which proposals must be received at the time above mentioned to be presented in open meeting when called for in the order of business relating to sealed proposals.

The bonds required to be furnished on proposals (and a possible subsequent contract) are those of some surety company authorized to do business in the State of New Jersey, or of two responsible real estate owners of Hudson County, or a certified check will be accepted in lieu of bond.

The Board reserves the right to reject any or all proposals if it is considered for the best interests of the city so to do.

By order of the Board of Commissioners of Jersey City.

Dated City Clerk's Office,
Jersey City, December 11, 1917.
FRANK A. DOLAN,
City Clerk.

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until Jan. 8, 1918.

Barge Canal Terminals

STATE OF NEW YORK
OFFICE OF SUPERINTENDENT OF
PUBLIC WORKS

December 7th, 1917.
Albany, N. Y.

Sealed proposals will be received by the undersigned at his office in the Capitol at Albany, N. Y., until twelve o'clock noon of Tuesday, January 8th, 1918, at which place and hour they will be publicly opened and read, for the construction of Barge Canal terminals pursuant to the provisions of Chapter 746 of the Laws of 1911, and of the acts amendatory thereof, as follows:

TERMINAL CONTRACT NO. 207

For constructing a Barge Canal terminal freight shed and a headhouse, exclusive of plumbing and heating, on pier 6, East River, New York, N. Y.

Contract plans sheets 1 to 20.

Plans may be seen and detailed specifications, engineer's estimate of quantities, proposal blanks, forms of contract and bonds required and other information for proposers may be had at the office of the Superintendent of Public Works at Albany, N. Y., at the office of the Assistant Superintendent of Public Works for the Middle Division at Syracuse, N. Y., at the office of the Assistant Superintendent of Public Works for the Western Division at Rochester, N. Y., and at the canal office, Spaulding's Exchange, Buffalo, N. Y.

Copies of detailed plans or drawings may be obtained from the State Engineer and Surveyor at Albany, N. Y., upon payment to him of the cost of producing them.

Monthly estimates will be paid of ninety per centum (90 per cent.) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank or trust company in good credit within the state and payable at sight to the Superintendent of Public Works for five per centum (5 per cent.) of the amount of the proposal.

The person whose proposal shall be accepted will be required to exectue a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time, in which case the amount of the deposit will be refunded by the Superintendent of Public Works.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of each contract shall be in such sum as shall be fixed by the Superintendent of Public Works, which sum shall not be less than twenty per centum (20 per cent.) of the estimated cost of the work according to the contract price, and an additional bond, known as the labor bond, in the sum of ten per centum (10 per cent.) of the

PROPOSALS

amount of the estimated cost of the work according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds, co-insurance only will be accepted.

Each proposal must be addressed to the Superintendent of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Superintendent of Public Works of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if in the judgment of the undersigned the interests of the State will be enhanced thereby.

W. W. WOTHERSPOON,
Superintendent of Public Works.

Bids received until Jan. 3, 1918

Heating, Plumbing, etc.

Thiells, N. Y.

Sealed proposals for Construction, heating, plumbing and electric work for Attendants' Home and Service Building, at Letchworth Building, at Letchworth Village, Thiells, N. Y., will be received by Mr. Frank A. Vanderlip, President of the Board of Managers of Letchworth Village, No. 7 Wall Street, New York City, until 12 o'clock noon on Thursday, January 3rd, 1918, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent. (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 2828, 2829, 2833, 2834, 2837, 2838, 2841, 2842 and addenda dated November 21st and December 5th, 1917. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at Letchworth Village, Thiells, N. Y., at the office of the Board of Managers, No. 7 Wall St., New York City, and at the New York Office of the Department of Architecture, Room 1224 Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: December 13th, 1917.

PROPOSALS

Bids received until Jan. 10, 1918.

Wingdale Prison Improvements

Wingdale, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work for Cell House, Interlocking Building, Mess Hall and Central Heating and Lighting Plant, and Underground Piping and Conduit Work, Underground Sewer and Water Connections and Underground Electric Service Connections, at Wingdale Prison, Wingdale, N. Y., will be received by the Commission on New Prisons, Room 618, Hall of Records Building, Centre and Chambers Sts., New York City, until 2:30 o'clock p.m., on Thursday, January 10, 1918, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a certified check in the sum of five per cent (5%) of the amount of proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent. (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 2812, 2813, 2814, 2815, 2879, 2882, 2869, 2885, 2872, 2880, 2883, 2870, 2886, 2873, 2881, 2884, 2871, 2887 and 2874. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the office of the Commissioner on New Prisons, Room 618, Hall of Records, New York City, at the New York Office of the Department of Architecture, Room 1224, Woolworth Building, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings and specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon the deposit of a certified check in the sum of $10.00 made payable to the State of New York for each set of plans and specifications, which check will be returned if plans and specifications are sent back in good condition to the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.

Dated: December 10, 1917.

Bids received until Jan. 21, 1918.

Asphaltic Cement

Lansing, Michigan

The City of Lansing, Michigan, will receive sealed proposals for asphaltic cement for the year 1918, in accordance with plans and specifications on file in the office of the City Engineer of said city, up to 4 o'clock p. m., Monday, January 21, 1918, at the office of the City Clerk of said city.

Each bidder must have in the hands of the City Engineer of said city a sample for test on or before January 8, 1918.

Each proposal must be accompanied with a certified check in the sum of $500.00.

Right is reserved to reject any or all bids.

JUDSON A. PARSONS, City Clerk.
Lansing, Mich., Dec. 18, 1917.

PROPOSALS FOR JETTY WORK, U. S. **Engineer Office, Masonic Temple, Jacksonville, Fla.—Sealed proposals for furnishing about 62,000 tons stone, and raising the outer portions of jetties at entrance to St. Johns River, Fla., will be received at this office until 12 o'clock noon, Jan. 5, 1918, and then opened. Information on application.**

SEARCHLIGHT SECTION

Contracts To Be Let

PROPOSALS

Bids received until Jan. 15, 1918.

Earthen Dams

Anaconda, Mont.

Sealed bids will be received by the Anaconda Copper Mining Company, Anaconda, Montana, until 2 P.M., January 15, 1918, for the construction of earthen dams for the retention of waste products of the Anaconda Copper Mining Company smelters at Anaconda, Mont. Total volume of earthen dams, 907,210 cu.yd. Other details of the work, including specifications and topographic map of the location can be obtained at the New York and Chicago offices of the Anaconda Copper Mining Co.

We Master Details for You by Accurately Listing All Items of Work and Materials

Conceive the advantage of being able to hand the contractor accurate detailed quantity lists on the work to be done and the materials entering into the building you propose to erect. We offer you our service in analysing to a nicety all your quantities through

The American Quantity System

It means protection to the contractor.

It offers opportunity to figure more jobs.

It speeds up estimating.

It gives a better basis for taking sub-bids.

It gives opportunity to buy material to better advantage.

It avoids loss of time figuring jobs that the other fellow wins because of omissions.

It gives you a bonded "take-off gang."

Write us for details.

THE QUANTITY SURVEY CO.
Incorporated
23 West 45th Street
New York City

PROPOSALS

Bids received until January 24, 1918.

Road Improvements

Jonesboro, Ark.

Sealed bids for the improvement of certain roads and streets in Road Improvement District No. 4, Craighead County, Arkansas, will be received by the Board of Commissioners of the Jonesboro-Nettleton Road Improvement District at the office of the Secretary, V. C. Kays, Jonesboro, Arkansas, until 2 P.M., January 24, 1918, at which time and place they will be publicly opened and read.

The work proposed consists of the grading and paving of approximately five and one-half miles of roads, together with the construction of the necessary culverts.

The principal quantities are approximately as follows:

Grading, average haul not exceeding 500 feet—19,800 cu.yd.

Paving, asphaltic concrete—58,100 sq.yd.

Vitrified pipe culverts, 18 in. in diameter, 160 lin.ft.

Vitrified pipe culverts, 24 in. in diameter—160 lin.ft.

Concrete in culverts and head walls—300 cu.yd.

Plans and specifications may be examined at the office of the Secretary of the District, Jonesboro, Arkansas, or at the Jonesboro office of the Engineers, Klyce & Kackley, Berger Building, or a copy may be obtained from the Engineers upon receipt of a deposit of $15, of which amount ten dollars ($10) will be refunded when the plans and specifications are returned in good order. If additional information is required, address the Engineers.

The right is reserved to reject any or all proposals and to waive informalities. The contractor will be paid cash on monthly estimates amounting to 80 per cent. of the work done.

All proposals or bids must be accompanied by a certified check drawn on a responsible bank or trust company and made payable to J. E. Parr, Treasurer, for a sum not less than 5 per cent. of the aggregate of the proposal. The successful bidder will be required to furnish a performance bond in the sum of 50 per cent. of the contract price.

V. C. KAYS,
Secretary Board of Commissioners.

KLYCE & KACKLEY,
Civil and Consulting Engineers,
505 Fourth and First National Bank Building, Nashville, Tenn.

Bids received until January 8, 1918.

Pier Construction

DEPARTMENT OF WHARVES, DOCKS AND FERRIES, 550 BOURSE BUILDING, PHILADELPHIA

December 15, 1917.

Sealed proposals, endorsed "Bids for Incidental Work required for the completion of Pier No. 78 South, Moyamensing Group, in the Delaware River, at the foot of McKean Street," will be received until 12 o'clock noon, Tuesday, January 8, 1918, in the office of the Director of the Department of Wharves, Docks and Ferries, 550 Bourse Building, Philadelphia, and then publicly opened.

PROPOSALS

Plans, specifications and blank forms upon which bids must be made can be obtained at the office above mentioned upon the deposit of a certified check in the amount of $25.00 to cover cost of blue prints, etc., which check will be returned upon the receipt of the plans and specifications in good condition and unmarked. The successful bidder will be furnished with all necessary blue prints free of charge.

Proof must be furnished the Department by the contractor that he has accepted the provisions of the Workingmen's Compensation Act of June 18, 1917, relative to workingmen's compensation insurance, and insured his liability thereunder or secured exemption therefrom.

No bid will be considered unless accompanied by a certificate from the City Solicitor of the City of Philadelphia, to the effect that the provisions of an ordinance approved May 25, 1860, requiring proposal bonds on all bids exceeding in amount $500 have been complied with.

The Director reserves to himself the right to reject any or all bids as he may deem best for the interest of the City of Philadelphia.

GEORGE S. WEBSTER,
Director.

Roads and Bridges

Santo Domingo, W. I.

The United States Military Government in Santo Domingo, Dominican Republic, contemplates spending the sum of about $1,500,000.00 for the construction of improved roads and bridges, within the next two years.

Proposals will probably be invited on about one-half of this work, within the next sixty (60) days, and official detail announcement of the work will be made at that time.

Any Contractors or Engineers desiring detailed information with regard to this work, should address A. J. Collett, Director General of Public Works, Santo Domingo City, Dominican Republic, West Indies.

Bids received until January 4, 1918.

Paving

Richmond, Va.

Sealed proposals will be received at this office until 12 o'clock noon, January 4, 1918, for the relaying, repairing and furnishing such new material as may be required to restore the City's part of the defective Asphalt Block Paving on Broad Street, between 3rd and 10th Streets.

Forms of proposals can be obtained on application.

A certified check, payable to the City Treasurer, for $1,000, must accompany each bid as a guaranty of execution of contract. The Administrative Board reserves the right to reject any and all bids or to let the work in part or as a whole.

CHAS. E. BOLLING,
City Engineer.

U. S. ENGINEER OFFICE, Cincinnati, Ohio.—Sealed proposals for furnishing, delivering and erecting gates for Locks Nos. 33 and 39, Ohio River, will be received here until 2 p.m., January 18, 1918, and then opened. Information on application.

SEARCHLIGHT SECTION

Miscellaneous

PROPOSALS

Bids received until January 22, 1918.

Enlargement of Filter Plant

Fort Worth, Tex.

Sealed proposals will be received by the Mayor and Board of Commissioners of the City of Fort Worth, Texas, until 9:00 o'clock Tuesday, January 22nd, 1918, for the construction of additional filters at the water filtration plant in Fort Worth, Texas.

The work consists mainly of the construction of four additional rapid sand filters, each having a capacity of 1,250,000 gallons per 24 hours; of the piping and control equipment connected thereto; of two wash water waste detention tanks; of the extension of the present filter gallery building; and of the laying of certain new pipes, sewers, conduits, etc.

Plans and specifications can be obtained from F. J. Von Zuben, City Engineer, City Hall, Fort Worth, Texas. A charge of $25.00 will be made for each set of plans and specifications, which amount will be refunded upon the return of the plans and specifications in good condition.

Plans and specifications can be seen at the office of John H. Gregory, Consulting and Designing Engineer, 170 Broadway, New York City.

Each bid must be accompanied by a certified check on a Fort Worth bank for $5000, and the successful bidder will be required to furnish a surety company bond of $20,000.

J. C. LORD,
Commissioner of Water Works.

Bids received until Jan. 4, 1918.

Viaduct and Retaining Walls

OFFICE OF CITY ENGINEER
Richmond, Virginia.

Sealed proposals will be received at this office until 12 o'clock noon, January 4, 1918, for the construction of a reinforced concrete viaduct and retaining walls, in line at Chamberlayne Avenue Parkway, over Bacon Quarter Branch valley.

Apply to Carneal & Johnston, Engineers and Architects, Richmond, Va., for plans, specifications and forms of proposals.

Also proposals will be received for the following work on Chamberlayne Avenue Parkway and on Chamberlayne Avenue:

Grading.
Granolithic Curbs and Gutters.
Graveling, and an alternate proposal for Bituminous Paving.

Plans, specifications and forms of proposals can be obtained upon application to the City Engineer.

A certified check of $1,000.00 payable to the City Treasurer must accompany each bid as a guaranty of execution of contract. The Administrative Board reserves the right to award contracts in whole or in part, or to reject any and all bids.

CHAS. E. BOLLING,
City Engineer.

U. S. ENGINEER OFFICE, Old Federal Building, Wilmington, Del.—Sealed proposals for dredging Inland Waterway between Rehoboth Bay and Delaware Bay, Del., will be received here until 11 A. M., Jan. 10, 1918, and then opened. Further information on application.

PROPOSALS

Bids received until January 11, 1918.

Drainage Construction

Philadelphia, Miss.

Sealed proposals addressed to A. D. Sharp, Chairman of Drainage Commission of Kentawka Drainage District in Neshoba County, Miss., for the construction of certain canals as shown on attached plan. Three contracts will be let separately and distinct and proposals will be received separately for Division "A," Division "B," and Division "C" according to Engineer's estimates which is made a part of this notice.

The Contractor will submit a proposal on each of the three divisions as outlined above, and the consideration to be paid cash, or bonds paid to the Contractor by the District. The right is reserved by the Commissioners to issue bonds monthly on Engineer's estimate; and should this be done the bonds will be matured yearly from date of issuance, bearing six per cent. interest payable annually and in serial number for 24 years.

Plans, profiles and specifications are on file at the office of the Chancery Clerk of Neshoba County, and also at the office of Bell and Redding, Consulting Engineers, 612 Audubon Building, New Orleans, La. Plans, specifications and proposals will be furnished by the Engineers on receipt of Fifteen Dollars to guarantee their safe return.

Each bidder must accompany with a certified check, not less than five per cent. of the amount bid, made payable without qualifications to the Board of Drainage Commissioners of the Kentawka Drainage District.

The Contractor will be required to give bond in the sum of the contract bid.

The right to reject any and all bids is reserved.

Bids received Jan. 11th at Noon at Philadelphia, Mississippi.

A. D. SHARP,
I. J. A. MORRIS,
A. J. MAYO,
Drainage Commissioners, Kentawka Drainage District, Neshoba County.
BELL & REDDING,
Engineers.

Bids received January 22, 1918.

State Road Work

Pennsylvania State Highway Department,
Harrisburg, Pa.

Sealed proposals will be received at said office until 10 A.M., January 22, 1918, when bids will be publicly opened and scheduled and contracts awarded as soon thereafter as possible, for the reconstruction of the following: Two pieces of either One Course Reinforced Concrete or Bituminous concrete on a concrete base pavement 15,050 and 13,750 feet in length in Erie County; two pieces of vitrified block pavement 2065 and 4700 feet in length in Clearfield County; 39,340 feet of either bituminous macadam on Telford base or reinforced concrete pavement in Somerset County; 21,426 feet of either One Course Reinforced Concrete or Bituminous Concrete on a concrete base pavement in Allegheny County; and for the grading and drainage of 6707 feet of roadway in McKean County. Bidding blanks and specifications may be obtained free, and plans upon payment of $2.50 per set, upon application to State Highway Department, Harrisburg. No refund for plans returned. They can also be seen at office of State Highway Department, Harrisburg, 1001 Chestnut Street, Philadelphia, and 904 Hartje Building, Pittsburgh. J. D. O'Neil, State Highway Commissioner.

PROPOSALS

POSITIONS VACANT

DRAFTSMAN, experienced in machinery and piping layouts; apply in person if possible. The National Sugar Refining Co., Yonkers, N. Y.

DRAFTSMAN on structural steel and mechanical detail; must have five years' experience; state experience and salary first letter. Address Box 386, Iola, Kan.

AT ONCE, experienced pile driver wanted, and dock-builder foreman for Government job, Philadelphia; average wages $60.00 per week; write giving experience in detail and earliest date of starting. P454—Eng. News-Record, Phila.

EXPERIENCED structural draftsmen and detailers wanted for steady employment; location, eastern Pennsylvania Write, stating experience and salary expected, P492—Eng. News-Record, Phila.

JUNIOR (civil) engineers for work on subway construction, New York City; provisional appointments pending examination; entrance salary, $1501 per annum, with opportunities for advancement; three years' construction experience required; technical graduates preferred; open to citizens only . Apply, giving full information as to education and experience, to the Public Service Commission, 120 Broadway, New York City.

MECHANICAL draftsmen wanted for general detailing and tracing for permanent positions. E. and T. Fairbanks & Co., St. Johnsbury, Vt.

CORRESPONDENTS in towns of 100,000 and up—We wish to connect with a correspondent in each city over 100,000 who will cover all large construction news for us each week for publication for our different papers, and will require but a few hours each week calling on engineers, contractors, etc., for construction items; give details as to present occupation, etc., which will be treated confidentially; good opportunity. Address Business News Department. McGraw-Hill Publishing Co., 10th Ave. and 36th St., New York.

SECRETARY-stenographer, young man preferred, not immediately subject to draft, who has had experience as stenographer in engineering office. Some knowledge of bookkeeping, office methods and filing system desirable. Construction work is just beginning and position offers excellent opportunity. Salary commensurate with experience and ability. Address Chief Engineer, Miami Conservancy District, Dayton, Ohio.

STRUCTURAL steel shop inspector wanted, competent to handle heavy railroad bridge work. Experience in inspection of movable bridges desirable; to be stationed in Pittsburgh coming year. C. E. C., Room 1403, 101 Park Ave., New York City.

STRUCTURAL draftsman wanted for railroad bridge and building work; technical men with experience in detailing steel work preferred; state age, education, experience, references and salary desired, and enclose sample of work. Address A. D. Case, Engr. of Structures, South Station, Boston, Mass.

STRUCTURAL concrete engineer to design and detail reinforced concrete buildings, foundations, walls, etc. Conditions of operation are competitive, rendering initiative and resource essential qualifications. Preference will be given to technical graduates. State fully experience, references, salary desired and status regarding draft. P525—Eng. News-Record.

SEARCHLIGHT SECTION

Employment Department

Pile Driving Inspectors and Dredging Inspectors

URGENTLY REQUIRED FOR GOVERNMENT WORK

Hog Island Shipyard, near Philadelphia, needs experienced Pile Driving Inspectors and Dredging Inspectors to lend their skill and energy to the patriotic project of building ships. Men trained in these branches are offered an unusual opportunity to serve the government in a vital way and at the same time improve their own position.

Apply by letter only.

ADDRESS BOX 999

AMERICAN INTERNATIONAL SHIPBUILDING CORPORATION
140 N. BROAD ST.
PHILADELPHIA

Mechanical Draftsmen Wanted

Thoroughly capable men wanted at once with experience in any or all of the following lines: industrial plant layouts, elevating, conveying and transmission machinery, piping, tank work and power plant construction.

Inquire Eleventh Floor 360 Madison Ave.
New York, N. Y.

POSITIONS VACANT

DRAFTSMAN wanted in office of engineer maintenance of way. One with railroad experience preferred. Apply at once. The Northern Ohio Traction & Light Co., 224 Hamilton Building, Akron, Ohio.

EXPERIENCED operator for Rumely tractor on road construction wanted. will employ for season's work; state experience, age, salary and when available. Address W. R. Greenlun, Co. Engineer, Leon, Ia.

STRUCTURAL and mechanical draftsmen and checker, preferably with experience in conveying machinery, wanted at once. Positions are permanent, advancement dependent upon ability. Opportunity for entering estimating and sales departments. Give statement of age, education, experience, references, salary desired and date available. Gifford-Wood Co., Hudson, New York.

DRAFTSMAN and structural steel detailer wanted in fabricating shop in Central New York. State experience and salary expected. P520—Eng. News-Record.

EXPERIENCED designer on electric baggage truck work wanted. P889—Eng. News-Record.

WANTED

Capable, energetic

CITY MANAGER.

Good executive council - elect City of Boulder, Colo., invites applications for position of City Manager under new charter, effective January first. Salary dependent upon man; population 12,000; big problems in water supply, paving, parks and drainage. State age, experience, special qualifications and give references in first letter.

Details concerning position furnished on request. *Address*

O. P. CLARK, City Clerk,
Boulder, Colo.

WANTED

SEVERAL MECHANICAL DRAFTSMEN

by large company in eastern Pennsylvania. State age, nationality, salary desired, when available, also experience and references in first letter.

P532—Engineering News-Record, 935 Real Estate Trust Bldg.,
Philadelphia, Penn

POSITIONS VACANT

DRAFTSMEN wanted at once, familiar with chemical plant design; New York district; state experience, salary and references. P. O. Box 376, Engineering Dept., Newark, N. J.

DRAFTSMAN, experienced in light structural iron work; inventive ability; give age, nationality and how soon available. P888—Eng. News-Record, Phila.

INSTRUMENTMEN, rodmen and draftsman wanted for railway work in the South. Apply Room No. 711, Union Station, Norfolk, Va.

SAFETY inspector for large plant in Philadelphia; only men with experience in this line acceptable; preference will be given to men with civil engineering education or drafting experience; good opportunity for the right man; salary about $30; state education, experience and references in first letter. P885—Eng News-Record, Phila.

CHIEF draftsman wanted by large water power company in the South. Must be able to handle men and have considerable experience in design of structural steel and concrete structures. Man familiar with design of hydro-electric power plants preferred. Position will be steady. Send full information as to age, education and experience, salary expected and when able to report. P880—Eng. News-Record, Philadelphia.

CIVIL or hydraulic engineer wanted; experienced in concrete designing and with building experience. P879—Eng. News-Record, Chicago.

STRUCTURAL steel draftsman with one or two years' experience wanted at once. Man familiar with mill building work preferred. Give age, experience and lowest salary to start, and state when can report. Southern Engineering Co., 503 Realty Bldg., Charlotte, N. C.

EXPERIENCED transitman wanted on railroad construction in Ecuador. Salary, $150 gold per month. Passage paid. Address with references, W. G. Fox, Ambato, Ecuador, South America.

RAILROAD in Middle West, whose inventory will be made in 1918 and 1919, has the following positions vacant: One roadway pilot, one instrument man, two computers, five draftsmen. P876—Eng. News-Record, Chicago.

ENGINEERS familiar with boiler houses equipped with Cox Stokers. Large corporation. Experienced first-class men for eight-hour shifts required. P873—Eng. News-Record, Philadelphia.

DESIGNER wanted with shop detail experience by railroad company; location, Detroit; salary, $150. P892—Eng. News-Record.

MECHANICAL engineer with factory experience; good opportunity for right man; give list of references and mention age and salary desired. P891—Eng. News-Record, Phila.

CIVIL SERVICE

SCIENTIFIC assistant (Public Health Work), Jan. 15, 1918; salary $1200 to $2000 per year. Civil Service Commission, Washington, D. C.

EMPLOYMENT AGENCIES

GENERAL Engineering Agency, Fulton Building, Pittsburgh, offers draftsmen, transitmen, plant engineers, millwrights and resident engineers over 200 desirable Eastern or Central States locations. If you are a draftsman, designer or squad chief, we will bid 10% to 25% for your services.

SEARCHLIGHT SECTION

Employment Department

EMPLOYMENT AGENCIES

Western Engineering Openings

Instrumentmen and draftsmen, $90 to $125; rodmen, $50 to $85; irrigation and power projects. Write immediately Business-Men's Clearing House, Denver, Colo. Applicants previously listed with us kindly advise present address and requirements.

Marine Draftsman

(Several) $2200 to $3000; also mechanical engineers, superintendents, etc., steel and wooden ship building. Office Service Company (Agency), 149 Broadway, New York City.

CORRESPONDENCE SERVICE

THE undersigned provides a confidential service designed to locate openings, through correspondence, for men earning not less than $2500 and up to $25,000; all lines. Not an employment agency, but a constructive, initiative service, covering individual negotiations. Established 1910. Complete privacy assured; present connections in no way jeopardized. Send name and address only for explanatory details. R. W. Bixby, 71 Niagara Square, Buffalo, N. Y.

POSITIONS WANTED

Mechanical and Electrical

MECHANICAL engineer wanted by company engaged in textile bleaching and finishing; excellent surroundings; 18 miles from Boston, Mass.; applicant should be capable of taking charge of all maintenance work, including power, piping, machinery and upkeep of buildings; permanent position; state age, relation to draft, experience and salary expected. P890—Eng. News-Record.

MECHANICAL engineer, 36, 15 years' experience in designing and installing special machinery and power plants, desires responsible position. PW886—Eng. News-Record, Phila.

ENGINEER; 18 years' experience in factory maintenance, design, equipment and construction, handling of men; A-1 credentials. PW491—Eng. News-Record, Phila.

Civil Engineer

GRADUATE civil engineer; 10 years' experience highway, railroad and hydroelectric location and construction; familiar with all types hard surface pavements. PW499—Eng. News-Record, San Francisco.

CIVIL engineer and draftsman wants position in the West or Southwestern part of the United States; American, married, age 30, well up in draft; references upon request. W. L. Hand, Fort Madison, Iowa.

CIVIL and sanitary engineer, M. Am. Soc. C. E., with 27 years' experience, desires an executive position; during the past four years has been sanitary engineer for a city of 70,000; plans for a complete sewerage system and disposal plant, have been completed and approved by the Penn. Board of Health; will be open for engagement Jan. 1, 1918. PW434—Eng. News-Record, Phila.

ENGINEER-manager (Assoc. Mem. Am. Soc. C. E.), desires engagement. Available about Dec. 1. Specialty, river and harbor or allied construction. In charge of large works. Over twenty years' active practice, five years foreign. Salary, $3000; foreign, $3000. PW1009—Eng. News-Record.

CIVIL engineer, age 25, wishes to make connections with city or county engineer for coming year; thoroughly experienced with municipal and road work; location, Iowa. PW484—Eng. News-Record, Chicago.

POSITIONS WANTED

CIVIL engineer, 31, ten years' experience design and construction of water-works, sewerage, roads, pavements, steel, concrete and timber structures, at present employed on construction of industrial plant, desires permanent responsible position; least salary, $2500. PW483—Eng. News-Record, Chicago.

CIVIL engineer, 43, experienced, responsible charge surveys, draftsman, computer, supervision and resident engineer, municipal and allied improvements, developments and construction, railroad preliminary location and construction, cantonment construction; have own instruments. PW858—Eng. News-Record.

CIVIL engineer, 31, married, open for permanent engagement Feb. 1; experienced in municipal, industrial and highway work, topography, design and construction of concrete bridges and structures; Eastern location. PW895—Eng. News-Record.

ENGINEERING executive, works or production engineer in machinery or chemical industry; 37 years old; best of training and 12 years' engineering experience; an organizer who can do things; will start as assistant or department manager. PW893—Eng. News-Record, Chicago.

Laborers and Mechanics

furnished for all kinds of construction and industrial works: also for lumber camps and saw mills. Commissary conducted on a modern plan, and no alcoholic beverages sold in connection with it.

EMPIRE LABOR AGENCY
Tels. 1745 & 3164 *Franklin* 93 Mulberry St., N. Y.

The Engineering Agency
Incorporated
Established 24 Years

Offers Opportunities in Engineering and Drafting

in all civil, structural, railroad, mining, municipal, mechanical and electrical lines.

1662 Monadnock Block, Chicago, Ill.

Employment Experts

CORPORATIONS, INDUSTRIAL ORGANIZATIONS, ENGINEERING, MANUFACTURING AND COMMERCIAL ENTERPRISES requiring high-grade EXECUTIVES, DEP'T MANAGERS, TECHNICAL HELP, OFFICE HELP, ETC., can obtain same through our organization. We secure the right man for the position. Specify your requirements. We guarantee results and satisfaction. Each order given special attention. Any person qualified for a better position should write us.

20th CENTURY EMPLOYMENT AGENCY
642 6th Ave., New York City

DO YOU NEED LABORERS? ***Just Call Canal 8970***

Any number of laborers of any nationality supplied on short notice anywhere. Commissary conducted on a new system; courtesy, promptness, efficiency.

The Central Labor Agency, *Main Office*: 139 Mulberry St., N. Y

Announcement

According to the by-laws the entrance fee to membership in American Association of Engineers automatically increases January 1, 1918.

Applications postmarked prior to the above date will entitle applicant to the current entrance fee of $2.00.

Time is Limited—Act Now!

American Association of Engineers
601-29 So. La Salle St., Chicago.
220 W. 42nd St., New York
502 Hibbs Bldg., Washington, D.C.

SEARCHLIGHT SECTION

Employment Department

POSITIONS WANTED

CIVIL engineer, 34, Assoc. M. Am. C. E., technical graduate, open for executive position; experienced and successful in dealing with public, executive officials and labor; wide experience in engineering and construction lines. PW899—Eng. News-Record.

ENGINEER of design, technical graduate, three years' experience with bridge company, nine years' experience with rail-road s and contractors, steel and concrete bridges, shops, elevators, power houses, etc.; at present employed; salary $2400. PW897—Eng. News-Record, Chicago.

VALUATION engineer of railroad on which Federal valuation work is nearing completion, will be available in near future for similar work elsewhere; age 42; 20 years' experience; salary, $3600. PW482—Eng. News-Record.

YOUNG engineer, 4½ years' experience, technical education, desires position with engineer or cont-ractor. Good references. Eastern location preferred. Address G. E. Wright, 111 E. Matson Ave., Syracuse, N. Y.

FORMER assoc. professor of civil engineering desires university position; has also had 12 years' practical experience in structural, hydraulic and municipal engineering, including responsible executive work. Would consider any location, Western position preferred. PW883—Eng. News-Record, Chicago.

IRRIGATION, drainage and water supply engineer; technical graduate; Assoc. Mem. Am. Soc. C. E. Eleven years' experience, surveys, designs and construction. Seven years in U. S. Reclamation Service. Very successful with men on construction. Excellent references. PW 881—Eng. News-Record, San Francisco.

ENGINEER (27) married, technical education; employed along electrical lines; desires position where education, experience and inclination count; experience; 2 years' general surveying (field and office) 2 years' assistant engineer in city of 14,000. 1 year drafting. References. J. Nickols, 502 2nd Ave., Albany, N. Y.

GRADUATE civil engineer, 1913, experienced structural steel and reinforced concrete designer, now handling responsible line and grade work, desires permanent position. PW877—Eng. News-Record, Philadelphia.

GRADUATE civil engineer; eight years' experience on street and highway work; three years water-works and sewers; one year canal work; seeks position along similar lines, anywhere. Age 36, married, best of references. G. Y., c/o Century Leather Goods, 1 West 34th St., N. Y.

CIVIL engineer, 35, married, fifteen years' planning and execution of construction work, twelve years' railroad experience, an expert draftsman. Fitted to take responsible charge of any railroad or civil project and complete it. An abstainer. Will locate anywhere. Salary, not less than $2500 considered. PW875 — Eng. News-Record.

CIVIL engineer and executive; college graduate, 29. Eight years' broad experience; railway construction, survey, valuation; land and topographic surveys. Contractor's engineer, highway, industrial, and cantonment construction; married. PW874—Eng. News-Record, Phila.

CIVIL engineers; three high-grade first-class men, experienced in railroad construction work for positions with railroad contractor; must be live wires and of broad experience. P490—Eng. News-Record, Cleveland.

ENGINEERING salesman or executive, 12 years' succesful experience covering both classes of work; university training; best references. PW863—Eng. News-Record.

CIVIL and hydraulic engineer, M. Am. Soc. C. E., 13 years' experience in design and construction; responsible charge; graduated; available at short notice. PW864—Eng. News-Record, San Fran-

GRADUATE civil engineer, 32 good organizer, desires position as construction engineer or superintendent of construction. Experience covers topographic and hydrographic surveys; design and construction of hydro-electric plants, sub-stations, transmission lines, etc. Available Jan. 1. PW523—Eng. News-Record.

Bridge and Structural

ENGINEER, construction and maintenance, 12 years' experience in charge of design, erection and maintenance of industrial and power plants; minimum salary, $300. PW423—Eng. News-Record, Cleveland.

Draftsmen

YOUNG man, 24, technical graduate, 6 years' experience as draftsman, including 1½ years on track work. PW443—Eng. News-Record.

REINFORCED-CONCRETE designer and superintendent; experienced on buildings, tanks, chimneys, retaining walls, foundations and Complicated structures. PW508—Eng. News-Record, Chicago.

DRAFTSMAN junior, 20, experienced; two years' engineering education. PW898—Eng. News-Record.

DRAFTSMAN with five years' practical experience with architects and engineers desires position with first-class firm on or near New York; experience in structural steel, reinforced concrete, industrial plant layout, etc.; best of reference. PW887—Eng. News-Record.

Superintendents

SUPERINTENDENT of Construction. American, 40, hustler, practical; experienced in all kinds of construction. PW 869—Eng. News-Record.

SUPERINTENDENT of construction; first-class executive, broad experience; difficult foundations, locks, dams, bridges, building and industrial plant construction; concrete a specialty. PW1001—Eng. News-Record.

SUPERINTENDENT, 12 years in charge of large construction jobs, tunnels, heavy trench and foundation work; irrigation, underground, reinforced concrete and difficult excavations a specialty; first-class, practical all-around man; A-1 references, go anywhere. PW436—Eng. News-Record.

IRRIGATION or drainage engineer, ten years' experience as construction superintendent, all kinds of work associated with large irrigation project construction and maintenance, land leveling and preparation for seeding, water distribution, drainage studies; have worked under eight prominent irrigation engineers on six of the largest irrigation projects; age 34; married; Assoc. Mem. Am. Soc. C. E. PW452—Eng. News-Record.

SUPERINTENDENT of construction, broad experience with general contractors on commercial, industrial buildings and fine residences; capable, assisting in office and estimating. PW445—Eng. News-Record.

CONSTRUCTION superintendent, engineer, 34, Assoc. Mem. Am. Soc. C. E., 13 years' pile driving, timber bridges, docks, wet excavations, concrete, railroad, sewer, disposal plant, shipways and general construction work. Phila. interview. PW862—Eng. News-Record.

SUPERINTENDENT or manager for general contractor, 20 years' experience in public and private buildings, locks, dams, power houses and coffer dams. Hustler and a good organizer, married, 38 years old. American by birth. Salary and commission. W. H. D., 301 Loewen Apartments, Oshkosh, Wis.

SUPERINTENDENT of construction; 20 years' experience in building roads, steam and street railroads, subway and elevated structures, trunk sewers, docks, buildings; open after Jan. 15; best references. PW896—Eng. News-Record.

You

Can Fill that Need

Wanted: Designers of Concrete and Steel

Special Courses of Home Study have been arranged by well known Engineer with 30 years' experience.

Designers of Steel and Concrete are scarce, the country needs trained men and needs them quick. These courses give actual experience in designing and estimating the cost of Steel and Concrete Structures in the shortest possible time. An opportunity for the ambitious man to get ahead. Also a course in Structural Drafting. *Write today for information.*

M 1006 Eng. News-Record.

SEARCHLIGHT SECTION

Employment Department

POSITIONS WANTED

FORMER contractor desires position as estimator, superintendent or office manager for builder. PW486—Eng. News-Record

SUPERINTENDENT, graduate civil engineer; 13 years' building erection, design and varied other experiences; salary or percentage of costs. PW159—Eng. News-Record.

SUPERINTENDENT of heavy construction wants position with good company; good man on reinforced concrete, brick and plaster work; good rigger and organizer; very best references. PW500—Eng. News-Record.

SUPERINTENDENT water-works; 15 years' experience in management, design and construction of water-works. Experienced in filter operation. Available Jan. 1, 1918. PW878—Eng. News-Record, Chicago.

BUILDER'S estimator, office manager, superintendent, age 31, civil engineer, 9 years' experience contracting work and directing business. Highly responsible. PW882—Eng. News-Record, Phila.

CONSTRUCTION engineer or assistant superintendent; at present employed in above capacity; 16 years' varied construction experience, initiative and executive ability; references furnished both as to ability and character from former and present employers; age 34; married; $200 per month; available Jan. 1, 1918. Address W. E. F., Box 152-Burgettstown, Penn.

MISCELLANEOUS

GENERAL foreman, with 150 timbermen and laborers, expects to finish present job in one month; experienced on subway, sewerage, carpentry, timber and concrete work. PW422—Eng. News-Record.

ENGINEER

Age 40, married, nineteen years' experience, including railroad position on heavy construction work up to and including that of chief engineer, engineer for contracting company, and in private practice.

Especially qualified to plan or take charge of construction work.

Connection desired with industrial company or contractor.

Interview east of Chicago.

Least salary considered $4000.

PW 872—Eng. News-Record, 935 Real Estate Trust Bldg., Philadelphia, Pa.

POSITIONS WANTED

EXPERIENCED purchasing agent and timekeeper desires position where genuine ability will be appreciated; full charge of field office upon large works for past six years; age 28, married; available Feb. 1, 1918. PW426—Eng. News-Record, Phila.

EXECUTIVE position wanted by experienced executive, thirty-one years of age and having the following qualifications: Graduate of an engineering university and a commercial college, experienced in accounting, construction, contracting and manufacturing. Bank references and names of past and present employers furnished to substantiate claims of a successful record in secretarial and managerial positions; also to advise you of ability, character and personality. PW 526—Eng. News-Record.

PURCHASING agent and contract manager; university and Massachusetts Institute of Technology graduate; 7 years' practical experience with two of the largest general contractors operating in the United States; 4 years in present position. Available on two weeks' notice for connection with company offering good future; present salary $3000. Highest regferences upon request. Age, 29; dependents, 2. Address J. M. C., Apt. 5B, 580 St. Nicholas Ave., New York City.

EVENING WORK

Reinforced Concrete Engineer

with wide experience in all kinds of structures would make plans, designs and estimates. W884—Eng. News-Record.

AGENTS AND SALESMEN

Fine Chance for Good Man

One of the largest manufacturers of Contractors' equipment has a desirable opening in the East for a salesman of exceptional character and ability. If you can qualfy, write full particulars promptly. W868—Eng. News-Record, Phila.

Do You Want Agent in Canada?

I am in position to represent you directly to the trade in Capada. Correspondence is the first essential between you and me. Irving Smith, 809 Unity Bldg., Montreal, Canada.

SALESMAN WANTED

An experienced Concrete Mixer Salesman. Write fully as to qualifications, salary expected and references. Replies cofidental *Address*

"MIXER SALESMAN", c/o J. R. Kay Co.,
Conway Bldg., Chicago, Ill.

AGENTS AND SALESMEN

Salesman Wants Position

With four years' experience and large acquaintance thtroughout the State of New York, eastern Pennsylvania, Province of Ontario, and smaller acquaintance in the New England territory, representing large steel and iron industry, selling structural and fabricated material; would like to conduct with some reliable company; good reference. W894 Eng. News-Record.

WANTED

Contracts Wanted

by reliable firm in the following line of work to extent of $10,000; structural steel erection, hand railing, piping, reinforced concrete. Donnell-Zane Co., 309 Broadway, New York City.

PATENT ATTORNEYS

IMPROVEMENTS wanted; send for free Bulletins listing manufacturers wants and book "Inventions—Patenting and Promoting." Lancaster & Allwine, 272 Ouray Building, Washington, D. C.

BUSINESS OPPORTUNITIES

Coke Oven Engineer

with extensive experience in construction of byproduct coke ovens and benzol plants now in charge of the execution of such contracts for a coke oven company, wishes to communicate with large engineering corporation who will take up the construction of original designers of continuous coke oven and benzol plants. Will consider a salary of $6000 per year for services and designs now prepared to be submitted for consideration. BO529—Eng. News-Record.

Turbines

For heads of 150 to 5000 ft.; 90 to 95% efficiency for full and partial load. Patented in Switzerland, application filed in America. Users and representatives sought. Steiner, Engr. Ruhbank, Zafingen, Switzerland.

FOR SALE

Dryer Cars, Boiler, Etc., Cheap

300 Dryer cars, double deck, roller bearings, used three months; good as new; cheap for quick sale; also 260 hp. Heine boiler, 1000 hp. Cookson heater, filter and oil seperator. J. P. Vinson, 45 South Lexington Ave., St. Paul, Minn.

WAR WORK WANTED

Experienced graduate engineer and business man wants executive position for period of war in some war industry. Some experience in smelting and mining work. Extensive experience in design and construction of buildings, grain elevators, bridges, etc., also in sales management, financing, leasing and handling real estate. Head of own engineering business for past nine years, making specialty of reinforced concrete and structural designing and reinforcing steel; also partner in real estate and investment business. Am a high-grade man and will consider only high-grade position with good parties. *Address*

Room 446, Maryland Hotel, Minneapolis, Minn.

EXECUTIVE
PURCHASING AGENT
CIVIL ENGINEER

Seeks Position

Present salary $200. *Age* 30. *Draft exempt.*

Experience in charge civil engineering design and purchasing of electrical, mechanical and civil engineering materials.

PW871—Engineering News-Record.

Your Advancement

is largely in
your own hands—it is
doubtful if anyone
else is worrying over it

Better positions are constantly being secured through small advertisements in the "Positions Wanted Columns"

60 cents for 20 words

SEARCHLIGHT SECTION

Miscellaneous

FOR SALE

Pumping Plant

Second-hand pumping plant 24-in. Worthington single-suction centrifugal pump; 155-hp. Babcock & Wilcox water-tube boiler; 240-hp. Buckeye engine, vertical, cross-compound; pumping capacity, 15,000 gal. per min., 36-ft. lift; condenser, water heater, boiler-feed pump and other attachments, complete; in perfect shape, ready to run. For particulars address R. Onishi, Pierce, Tex.

Transit

One transit, first-class condition (Queen's), 5-in. needle, $100. Write Purchasing Agent, Mount Royal Tunnel Co., 411 Dorchester St. West, Montreal, Canada.

Steam Shovel

One Marion revolving steam shovel, Model 28; 1 five-ton Buffalo Pitts tandem roller, and 1 twelve-ton Buffalo Pitts roller, Martin Murray, Burdett Building, Troy, N. Y.

Boiler

A.A. 150-hp. Wickes Bros. horizonztal return-tubular, with stack and fittings, complete and in excellent operating condition; bargain. For further particulars, Power Equipment Co., Inc., Astor Trust Building, New York City.

FOR SALE

Erie Shovel

TYPE B, ¾-yd. bucket; first-class order. Price, $5500. FS859—Eng. News-Record.

Pump

1 rebuilt Worthington duplex steam pump, 12 x 8½ x 10-in., first-class condition. Not used since rebuilt. Western Felt Works, 4115 Ogden Ave., Chicago, Ill.

Steam Engine

A.A. 125-hp. Fitchburg, Corliss, complete, fine condition; bargain. For further particulars, Power Equipment Co., Inc., Astor Trust Building, New oYrk City.

Going Water Power For Rent or For Sale in center of city; block from railroad; splendid location for factory or cereal mill. Geo. O. McArthur, Baraboo, Wis.

WANTED

AIR COMPRESSOR

Capacity 75 to 85 ft. per min. Belt or gear drive. State age, make, best cash price F.O.B. Rock Island, Ill., and all other necessary information.

The Frazier-Davis Const. Co., Rock Island, Ill.

WANTED

one model No. 36

Marion Steam Shovel

or equivalent. Reach and load in cars 15 ft. from top of rail to base of cut.

W 900—Eng. News-Record
1570 Old Colony Bldg., Chicago, Ill

Wanted

Air Compressors

2—150 to 400 ft. capacity two-stage machine preferred

W419—Eng. News-Record, 1570 Old Colony Bldg., Chicago, Ill.

RENT

40 ft. x 140 ft.

FIRST FLOOR AND BASEMENT

721-3-5-7 ARCH STREET

in the heart of the machinery district of

PHILADELPHIA

LIEBERMAN & AXILBUND, 1237 Market St., Philadelphia, Pa.
"Central Leasing a Specialty"

FOR SALE

STEEL BUILDING MATERIAL

Extra heavy material for a six-story structural steel building, 520 tons. This building has never been erected. Steel can be changed to suit any style of building.

M. H. O'DONNELL
805 Trumbull Avenue, Detroit, Mich.

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SUCH AS

RAILS — CAR WHEELS HEAVY CAST MACHINERY — COPPER WIRE

All grades of scrap metals.
Advise us quantities and give full details.
GET OUR PRICES.

NATIONAL METAL & RUBBER CO.
39 India Wharf, Boston, Mass.

WANTED

FOR IMMEDIATE DELIVERY

Turbo-Generators

1—2000 Kw. (or 3000 Kw.) A. C. Turbo-Generator. Turbine for 150 lb. steam pressure. Generator for 600 volts, 3-phase, 60-cycle current. To include condenser, water and air pumps, and motor generator exciter set.

1—500 Kw., D.C. Turbo-Generator. Turbine for 150 lb. steam pressure. Generator to be compound wound, for 220 volts, to include condenser, water and air pumps.

PRESSED STEEL CAR COMPANY
Pittsburgh, Pa.

WANTED

Send us a list of any

EQUIPMENT

you may have which you wish to dispose of. ALSO STATE YOUR WANTS.

Miller-Crippen Equip. Co., Inc.
423 First Nat'l Bank Bldg., Syracuse, N. Y.

WANTED

1—18-ton, 42-in. gauge saddle tank

LOCOMOTIVE

6—Climax 42-in. gauge, logging

CARS

L. BRENNER & COMPANY
Lebanon, Pa.

WANTED

8-wheel

LOCOMOTIVE CRANE

20-ton, 50 to 60-ft. boom.

First-class condition.

Address, giving full particulars,

Pearson & Ludascher Lumber Co.
Philadelphia, Pa.

WANTED

CONTRACTORS' EQUIPMENT

of all kinds, for cash—also

PIPE AND FITTINGS

PIPE & CONTRACTORS SUPPLY CO.
3 Dover St., New York, N. Y.

Little "WANT" cards
bring big results in
the News-Record

SEARCHLIGHT SECTION

Second Hand Equipment

FOR RENT

ONE CEMENT-GUN

Equipment complete, with Chicago Pneumatic Fuel Oil Driven

COMPRESSOR

183 lb. per minute. Equipment may be leased separately.

MICHAEL STAUB, Mamaroneck, N. Y.

FOR RENT

2 DUMP TRUCKS

5 ton Pierce-Arrow and 6 ton Garford with 5 ton Watson Trailer. Will rent by day or contract.

H. B. Sproul Construction Co., Inc.
Peekskill, N. Y.
Telephone *Peekskill* 836 J.

Keep your eye on the Searchlight and your advertisements in it.

Immediate Delivery

LOCOMOTIVE CRANES

2—150-ton **Industrials,** 50-ft. booms.
1—30-40-ton **Ohio,** new this year.
1—17-ton **American,** 40 ft. boom, 4-wheeler.
1—15-ton **Browning,** 40-ft. boom, 4-wheeler.
1—20-ton **"O. & S."** NEW, 8 wheels.
1—10-ton **Industrial,** for sale or rent.
5— 5-ton NEW Cranes made by a standard manufacturer.
(Deliveries, one in week and one per week thereafter.)

MOTORS

100—NEW, up to 50 H.P., any current.

BOILERS

2—100 H.P. Ames.
2— 80 H.P. "R. & M."
4—150 H.P. Edgemore.
1—150 H.P. Hodge.
1—125 H.P. Portland—Vertical.
2—200 H.P. Marine—Fire Tube.
1— 75 H.P. Scotch—Internal Combustion.
5—72 x 18 Horizontal Return Tubular.
2—125 H.P. Locomotive Type.
Also a number of good offerings in **"B. & W.," Stirling** and **Heine** Water Tube Boilers.

CARS

370—Flat Cars, 25 ton capacity.
Tank Cars, equipped for oil or acid.
Gondola Cars, 80,000 lb. capacity.

DERRICKS

Guy, Stiff Leg, Traveling.

DREDGES

Hydraulic, Suction, Dipper. We solicit Dredging Contracts.

DRILLS

Let us know your requirements.

ENGINES

1—NEW, Girder Frame, Balance Piston Valve, 100 H.P., 14 x 30. A Bargain.
Also some good offerings in Steam, Gasoline, and Direct Connected Sets.

ELECTRICAL EQUIPMENT

Motors, Generators and Motor-driven Accessories.

HOISTS

Steam and Motor-driven. Send for List.

LOCOMOTIVES

Switchers, Saddle Tank, Tenders. Any gage.
1—16-ton **Gasoline Locomotive,** standard gage.
3—10-ton **Electric Locomotive,** 36-in. gage.
3—3- to 6-ton **Electric Locomotive,** 42-in. gage.

SHOP MACHINERY

Complete equipment for manufacture of 3-in. shells.

CONCRETE MIXERS

What do you require? If we haven't it we know where to get it. Steam, Gasoline or Motor driven.

PILE DRIVERS, PILING, PIPE, PUMPS RAILS

All rails are high, but we have some good offerings even in this market.

ROPE

Crucible Steel, Plow Steel, Swedish Iron, 50 tons, New and Used. Immediate.

STEAM SHOVELS

A-28 Marion, 14-B **Bucyrus, "O" Thew,** and others, heavier.

WATER-CRAFT

Tugs, Derrick Lighters, etc.

Contractor's Accessories, Railroad Equipment

FRANK T. CRAVEN COMPANY
50 Church St., New York
Telephone 6341 Cortlandt

DECEMBER SPECIAL SNAPS

HOISTING ENGINES

1—6¼ x 8, D.C., D.D. Marsh-Henthorn Hoisting Engine, with boiler, direct connected with swinger.
1—7 x 10 D.C., 3 drum Marsh-Henthorn Hoisting Engine, with boiler.
1—7 x 10 D.C., D.D. Lidgerwood, with boiler.
3—7 x 10 D.C., Swinging Engines, reversible.
1—8¼ x 10, D.C., Swinging Engine, reversible.
1—5 x 8 Lidgerwood Reversible Swinging Engine.
1—6¼ x 10 D.C., D.D. National, complete with boiler.
1—6¼ x 8, D.C., D.D. Lidgerwood, with boiler.

SHOVELS

1—Thew "O" ¾-yd.
1—Osgood No. 18, ¾-yd.
2—Bucyrus 70 "C."

LOCOMOTIVES

1—18 x 24 Baldwin Saddle Tank.
1— 9 x 14 Baldwin, 36-in. gage.
1— 9 x 14 Porter, 36-in. gage.
1—10 x 16 Davenport, 36-in. gage.

CARS

10—40-ton capacity Gondolas.
38— 4-yd. Western Dump Cars.
20— 3-yd. K. & J. Dump Cars.
10—12-yd. Western Dump Cars.

DRAG LINES

2—1-yd., all steel, 40-ft. boom, full revolving.
1—1½-yd., all steel Lidgerwood, 60-ft. boom.

CRUSHERS

1—Austin 4, 5, 6 and 7½.
1—Gates 3D, 7½D, 8K, 9K.

RAIL

40 ton of 16 lb.
60 ton of 40 lb.
1000 ft. 30-in. Industrial Track.
250 ton of 70 lb.

PUMPS

1—Canton-Hughes Duplex Compound, high pressure, 12 x 18 x 10 x 18, 800 gal. per min., and various other makes and sizes.

All the above equipment is owned by us and is in good condition, ready for immediate operation and shipment, guaranteed to be exactly as represented.

MARSH-BOTHE MACHINERY COMPANY, Sales Engineers
975-980 Old Colony Building, Chicago, Ill.

FOR SALE

Cantonment Contractor Shipyard Builders

Attention

Smith No. 4 **Concrete Mixer**—17 cu. ft., 7 x 8 **Vertical Engine.**
1—**Air Receiver**—10 ft, 6 in. x 4 ft.
15—1 cu.yd. Atlas 2-way steel **Dump Cars,** 24 in. gage.
1—Mead-Morrison 4½x6 Independent **Swinging Engine.**
New and Relaying Yellow Pine **Ties** for immediate Delivery at normal prices.
Several **steel** and **wooden tanks** 500 to 2000 gallon capacity.

Tell us your wants—we may have the equipment you require at our yard.

DOOLEY-KILLIAN CO., Inc.
26 Cortlandt St., New York City

FOR SALE—Through plate

GIRDER BRIDGE

Designed for 60-ton interurban cars, made up of two-plate girders length 53 ft., depth 4 ft, with suitable floor system,

INDIANA RAILWAYS & LIGHT CO.
Kokomo, Indiana

New Advertisements for the SEARCHLIGHT SECTION can be received until 4 p.m. Tuesday for Thursday's issue

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Motor Generator Set

1—75 K.W. Motor Generator Set, consisting of No. 180-L, Type S.K., Westinghouse, 75 K.W., 125 volts, 600 ampere, 860 R.P.M., compound wound, commutating pole generator, direct connected to one 112 H.P., type C.S., Westinghouse, 440-volt, 3-phase, 60-cycle, 860 R.P.M Motor. Outfit includes fused auto starter, but no switchboard.

Controller

1—New 80 H.P., 220-volt, D.C., Cutler-Hammer reversing magnetic Controller.

Mill Motor

1—New 80 H.P., No. 80 M.C. Westinghouse, 230 volt, Series-wound, mill motor.

THE WELLMAN-SEAVER-MORGAN COMPANY, Cleveland, Ohio

SEARCHLIGHT SECTION

Second Hand Equipment

Rails . . .

100 tons	16	-lb., New
400 tons	12	-lb., New
600 tons	20	-lb. Relayers, with bars
500 tons	25	-lb. Relayers, with bars
400 tons	35	-lb. Relayers, with bars
1000 tons	45	-lb. Relayers, with bars
900 tons	56	-lb. Relayers, with angles
600 tons	60	-lb. A.S.C.E., New, with angles
250 tons	67½	-lb., New, 5-in., with angles
350 tons	75	-lb. A.S.C.E., New, with angles
125 tons	90	-lb. Santa Fe standard
500 tons	100	-lb. PRR, with angles

Plates . . .

225 pcs. ½-in. Steel Plates, ranging in width from 2 ft. 3 in. to 4 ft. 4 in. and in length from 6 ft. to 18 ft. 10 in. **Almost new.**

Wire Rope . . .

2 pcs. 1-in. Galvanized Cast Steel, 4000 ft. **Excellent**

11 pcs. 1½-in. American Plow Steel, 675 ft. lengths. **Practically new**

1 pc. 2½-in. Cast Steel, 2100 ft. **Good**

Locomotives . . .

Rod Engines, 4-ft. 8½ in. gage

2—49½-ton Vulcan, 6-wheel Switchers. Practically new.

Saddle Tanks, 4-ft. 8½-in. Gage

2—10 x 16-in., 18-ton Porter, with air brakes.

Saddle Tanks, 36-in. Gage

1—5 x 8-in., 4-ton Porter, 150 lb. **Thoroughly overhauled.**
1—6 x 10-in., 7-ton Davenport, 160 lb. **Good.**
14—9 x 14-in., 14-ton Porter, 140 lb. steam.
5—9 x 14-in., 14-ton Vulcan, 140 lb. steam
1—9 x 14-in., 14-ton Davenport, 140 lb. steam
1—9 x 14-in., 14-ton Lima
1—10 x 16 in., 18-ton Davenport, 160 lb. steam

Saddle Tanks, 24-in. Gage

3—7 x 12-in., 9-ton Davenport

Road Rollers . . .

2—15-ton Kelly-Springfield, 3-wheel steam. **First-class**

Piling . . .

Large stock U. S., Lackawanna, etc. **All sizes and lengths**

Hoists . . .

Steam, with Boiler

2—5 x 8 Flory, D.C., D.D. **First-class**
1—7 x 10 Lidgerwood, D.C., D.D. **First-class**
2—8½ x 10 Lidgerwood D.C., D.D. **First-class**

Electric

1—Lidgerwood Single Drum Reverible, geared to 37 H.P. G. E. motor, 3 phase, 60 cycle, 220 volt, complete. **Excellent**
1—American Single Friction Drum, geared to 82 H.P. G. E. motor, 3 phase, 60 cycle, 220 volt, complete. **Excellent**

Boilers . . .

1— 45 H.P. Loco type, 100 lb. pressure
1— 60 H.P. Loco type, 100 lb. pressure
2—150 H.P. Scotch Marine Type, corrugated furnaces, 3½-in. tubes, 160 lb. steam pressure

Tanks . . .

26—27,100 to 38,500 bbl. Oil Storage. A-1

Also all other sizes, storage and pressure.

Buying or Selling—makes no difference to us, just so it's BIG. *Watch this space!*

Cars, Portable Track, Cranes, Air Compressors, Heavy-Machinery,

ZELNICKER
WALTER A. ZELNICKER SUPPLY COMPANY
St Louis

Engines, Pumps, Generators, Beams, Skips, Mixers, Buckets, etc.

Don't forget to get Bulletin 227 — 44 pages of the livest Bargains in the field — FREE!

STEEL SHEET PILING

200 pieces, U. S. or Lackawanna, about 20 ft. long.

Excellent condition.

BROWN & SITES CO., 30 Church St., New York, N. Y.

TURBINES

AND TRANSMISSION MATERIAL

2—50-in. Samson turbines
1—Woodward governor, 1200 H.P. capacity, size F, No. 1609
3—Iron pulleys, 5 ft. 9 in. diam., 38-in. face
5—48-in. Clutches
17—Bridge trees
71 ft. 5 15/16-in. Shafting
6—Quill boxes
10—5 15/16-in. Boxes
3—5 15/16-in. Solid couplings
1—Pulley coupling, 3-ft. diam., 8-in. face, 5 11/16 in. bore
1—Pulley, 24-in. diam., 9-in. face
5—Clutch stands
1—Rope drive, sheeves, pulleys and hangers complete

J. F. NOLL, *Supt. Public Works,* Harrisonburg, Va.

CENTRIFUGAL PUMPS

	Cap. Gals
4—12-in. Worthington Belted	4000
2—10-in. Morris Belted	3000
2— 8-in. Wickes Belted	2000
3— 8-in. Wickes, with engines	1500
1— 6-in. Morris, with engines	800
1— 4-in. Wickes, with engines	400
1— 4-in. two stage, with 40-H.P., 220-volt, 60-cycle motor	300
1— 3-in. Gould, with 3 H.P., 220-volt, D.C. motor	200

Immediate Delivery.

WICKES MACHINERY COMPANY, Jersey City, N. J.

FOR SALE

One Worthington Triple Expansion

CONDENSING PUMP

10 x 16 x 25 x 13 x 18. In fair condition, cost new over $10,000.

Will sell reasonable.

KANSAS CITY STOCK YARDS CO.
Kansas City, Missouri

Keep your eye on the Searchlight and your advertisements in it.

REINFORCING RODS

30,000 lb. new corrugated bars, stock length. List sent on application.

JOHN W. COWPER CO., Garden City, N. Y.

CLAM SHELL

FOR SALE

Brown Hoist, patented two-yard bucket. Has been used for emergency work only. Like new.

L. G. Everist, *Incorporated,* Sioux City, Iowa.

SEARCHLIGHT SECTION

Second Hand Equipment

For Sale—Sound Plant in Good Operating Condition

AIR COMPRESSORS

2—Ingersoll-Sergeant Class A, 18 x 18½ x 24 Straight Line, steam driven, 650 ft. per minute.
1—16 x 10 x 10 Bury, belt driven, 2-stage, cap 379 ft. at 100 lb. pressure.
1—Rand Duplex, steam driven, 600 ft. capacity with receiver.

BOILERS—Locomotive Type

6—50 H.P. 1—100 H.P. 1—80 H.P.

BOILERS—Vertical Tubular

2—12 H.P. 1—15 H.P. 4—40 H.P. B & S joints.

Economic

1—80 H.P. Erie City return-tubular Economic boiler on skids.

GENERATOR

1—Wood System, 60 KW., belt driven Generator, with exciter and instruments, with New York Safety Steam Power Co. engine.

DUMP CARS

15—4-yd. Western, extra heavy.
25—3-yd. Peteler, 30-in. gage.
20 pairs of wheels and axles, for 4-yd. Western, extra heavy, brand new.

CONCRETE MIXERS

2—Ransome, 1-yd. on skids, with steam engine, but no boiler.

CABLEWAY

1—Lambert, 6-ton, 900-ft. span.

HOISTING ENGINES

3—American, 7 x 10 double cyl., 2 drum, with boom swinger, but without boiler.
2—5½ x 8, double cyl., 2 drum, with boom swinger, with boiler.

ROAD ROLLER

1—10-ton, 3-wheeled, Iroquois Steam.

LOCOMOTIVES, DRILLS, PUMPS, STEAM SHOVELS, ETC.

All thoroughly overhauled and ready for immediate and constant service.

United States Equipment Company, 208 South La Salle Street, Chicago

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FOR SALE

AIR COMPRESSOR

Corliss Type

size 18 x 32 x 30 x 18 x 36. Manufactured by Laidlaw-Dunn-Gordon Company. Now in operation and in excellent condition.

Address:

THE PINE BLUFF COMPANY
Pine Bluff, Ark.

Immediate Delivery—A Rare Bargain

ENGINE AND GENERATOR

One 17-in. x 24-in. Fitchburg Corliss non-condensing engine with 10-ft. fly wheel direct connected to Bullock 150-K.W. direct-current Generator, 1250 amperes, 116-120-volt, 150 R.P.M.

This outfit is in excellent condition and is complete with all parts for service. Volt meter, Ammeter, Rheostat, Circuit breaker, Cable, etc. Can be inspected set up and working. It has been maintained in fine shape and is as good as new.

Price is very reasonable as it is to be replaced by larger machine and must be moved quickly.

If interested wire for price

HOISTING MACHINERY COMPANY, 50 Church Street, New York, N. Y.

STEAM ENGINES

1—10 H.P., upright Greenfield, in good condition.
1—80 H.P., slide valve, in good condition.

PFAFF & KENDALL
Ferry & Foundry Sts., Newark, N. J.

BOILERS

1—150 H.P. McEwan Return Tubular Boiler, 72 x 18, 125 lb. steam.
2—80 H.P. Hurley Return Tubular Boilers, 60 x 16, 100 lb. steam.

HARRY E. SALZBERG & CO.
30 Church St., New York

FOR SALE

BOILERS

L. G. EVERIST, INC.
Sioux City, Iowa

BARGAIN

Union 30-H.P., heavy duty, two cylinder, slightly used (25-H.P. on natural gas)

GAS ENGINES

2—F.O.B. Kansas City, each $900
1—F.O.B. Fort Worth 900

Price new, each $1900

Immediate Delivery

FEDERAL TELEGRAPH CO.
San Francisco, Cal.

FOR SALE

AIR COMPRESSOR

Sullivan Class WJ3, Angle Compound, 18 x 11 x 14, Belt Driven, Capacity 886 cu. ft.; with Air Receiver; New, Fall 1915.

JAMES STEWART & CO., INC., Contractors
30 Church Street, New York City

FOR SALE OR RENT
2 Osgood 18-¾ yd

Steam Shovels

in first-class shape, can furnish operators

GENERAL CONTRACTING CO.
701 Amer. Trust Bldg., Cleveland, O.

AIR COMPRESSOR

Belted 375 cu.ft., 100 lb. Pressure, Ingersoll 2-stage air, size 16 x 10 x 10 in., Class J., excellent condition.

Immediate delivery.

A. G. SCHOONMAKER & SONS
25 Church St., New York, N. Y.

BOILERS

75 H.P. Scotch, 130 lb. pressure, dry back, corrugated furnace, 60 ft. stack, injector, all complete, on cars, immediate shipment, 150 H.P. return tubular, 100 lb. pressure, Hartford certificate, on cars, immediate shipment.

HACKLEY MORRISON, Richmond, Va.

SEARCHLIGHT SECTION

Second Hand Equipment

POWER MACHINERY

ALTERNATING CURRENT MOTORS IN STOCK

60 CYCLE

No.	H.P.	Manufacturer	Type or Form	Phase	Voltage	Speed
1	300	Allis-Chalmers	ANY	3	2200	514
1	300	Westinghouse	C	2	2000	495
1	225	Crocker-Wheeler (Slip Ring)		3	2200	450
1	200	Westinghouse (2 Bearing)	C	2	2000	570
2	200	Westinghouse (New) (Slip Ring)	CW	3	2200	600
1	200	General Electric (Slip Ring)	M	3	2200	600
1	200	Allis-Chalmers (2 Bearing)	(Synchronous)	2	2200	600
1	150	Westinghouse (3 Bearing)	CCL	3	440	580
1	150	General Electric	K	3	440	720
1	150	General Electric	K	3	2200	720
3	125	Allis-Chalmers (Slip Ring) Variable Speed	ANY	3	2080	350-495
1	85	General Electric	L	3	440	720
1	75	Burke	Squir. Cge.	2	220	300
1	75	General Electric	L	3	440	514
1	75	Westinghouse	CCL	3	220	850
1	75	Westinghouse	CCL	3	440	855
1	75	Allis-Chalmers (New)	AN	3	440	900
1	75	Westinghouse (Slip Ring)	HF	3	550	1200
2	50	Westinghouse	CCL	3	440	850
6	50	Allis-Chalmers (New) (Slip Ring)	ANY	3	440	900
1	50	General Electric (Slip Ring)	M	2	220	900
1	50	General Electric (Slip Ring)	M	3	440	900
1	50	Fairbanks-Morse	B	3	220	900
1	40	Westinghouse	CCL	3	220	840
1	40	Westinghouse	CCL	3	400	840
1	40	Westinghouse	Squir. Cge.	2	400	850
4	40	General Electric (New)	K	3	440	900
1	40	Allis-Chalmers (New)	AN	3	220	1200
1	35	Westinghouse	CCL	2	220	900
2	35	General Electric	K	2	220	900
1	35	General Electric	KT-B	3	440	900
1	35	General Electric	K	3	220	1150
1	30	Westinghouse	CCL	3	220	840
1	30	Allis-Chalmers	AN	3	220	860
4	30	Allis-Chalmers	Squir. Cge.	3	550	860
1	30	Allis-Chalmers (New) (Slip Ring)	ANY	3	440	865
1	30	General Electric	Squir. Cge.	2	220	900
1	30	General Electric	L	3	220	900
1	30	Bullock	Squir. Cge.	3	550	900
1	30	Westinghouse	CCL	3	220	1120
1	30	Westinghouse	C	2	400	1120
1	30	Allis-Chalmers	AN	3	220	1150
1	30	Allis-Chalmers (Slip Ring)	ANY	3	550	1160
2	30	Allis-Chalmers (New)	AN	3	220	1200
1	25	Allis-Chalmers	Squir. Cge.	3	550	860
1	25	Allis-Chalmers	AN	3	220	1150
14	25	Allis-Chalmers	Squir. Cge.	3	550	1160
1	25	General Electric	KT-B	3	220	1800
2	25	General Electric (Slip Ring)	M	3	550	1800
1	20	Wagner	BP	2	220	850
14	20	Allis-Chalmers	Squir. Cge.	3	550	860
1	20	Wagner	BW	2	220	900
3	20	Westinghouse	C	2	440	1120
2	20	Allis-Chalmers	AN	3	220	1130
1	20	Wagner	BW	2	220	1140
6	20	Fairbanks-Morse	KBV	3	220	1140
2	20	General Electric	KT-B	3	440	1200
1	20	Lincoln	"H"	3	220	1200
1	20	General Electric	Squir. Cge.	2	220	1800
1	15	Crocker-Wheeler	Squir. Cge.	3	220	565
1	15	Allis-Chalmers	Squir. Cge.	3	440	680
1	15	Allis-Chalmers	Squir. Cge.	3	440	860
15	15	General Electric	KT-B	3	220	900
1	15	Allis-Chalmers (Slip Ring)	ANY	3	550	1160
1	15	Westinghouse	CCL	3	220	1200
1	10	General Electric	KT-B	3	220	900
1	10	Fort Wayne (Back Geared) (Slip Ring) (New)	MA	3	220	1200
1	10	General Electric	K	3	220	1200
2	10	Westinghouse	CCL	3	220	1200
1	10	Fairbanks-Morse	B	3	220	1200
1	10	Allis-Chalmers		3	220	1800
1	10	General Electric (Vertical)	C	3	440	1800
1	10	Fairbanks-Morse	B	3	220	1800
2	7½	Allis-Chalmers		2	220	1150
1	7½	General Electric	L	2	220	1200
3	7½	Westinghouse	CCL	3	200	1700
1	7½	Allis-Chalmers	Squir. Cge.	3	220	1730
1	7½	Western Electric	KT-180	3	220	1800
1	7½	Fort Wayne	KT-C	3	220	1800
1	7½	General Electric	KT-C	3	220	1800
1	7½	General Electric	KQ-C	2	220	1800
1	5	General Electric	KQ-C	2	220	1200
1	5	Fort Wayne	Squir. Cge.	3	110	1800
1	4½	Lincoln	Squir. Cge.	2	220	720
1	4	General Electric	K	3	220	900
1	3	Westinghouse	CS	3	550	1200

25 CYCLE

No.	H.P.	Manufacturer	Type or Form	Phase	Voltage	Speed
1	1250	General Electric	M	3	2080	365
2	450	Westinghouse	CCL	3	400	300
1	200	Westinghouse	CCL	3	2200	180
1	200	Westinghouse	C	3	440	180
1	150	Westinghouse	CCL	3	400	180
1	150	Allis-Chalmers	AN	3	440	190
1	75	General Electric (Slip Ring)	ITC-M	3	440	475
1	75	General Electric	ITC-5015	3	2200	500
1	75	Triumph	Squir. Cge.	3	440	720
2	50	General Electric	MI	3	440	500
1	50	Westinghouse	C	3	400	500
1	50	Allis-Chalmers	AN	3	440	1450
2	37	General Electric	ITC-M	3	440	750
1	35	Burke	Squir. Cge.	2	220	750
1	30	Allis-Chalmers	Squir. Cge.	3	440	480
1	30	Westinghouse	CCL	3	440	710
1	30	Allis-Chalmers	AN	3	440	720
1	30	Fairbanks-Morse	Squir. Cge.	3	440	1500
1	15	Allis-Chalmers	AN	3	440	720
2	10	Fort Wayne	C	3	220	1500
1	10	General Electric	MIC	3	110	1500
1	8	General Electric	A	2	220	375
2	7½	General Electric	K	3	440	750
10	5	Allis-Chalmers	AN	3	440	720
5	2	General Electric	KT-C	3	440	750
3	1	General Electric	KT-C	3	440	750
1	½	Fairbanks-Morse	B	3	440	1500

We have on hand all classes of Power Machinery

MACGOVERN & COMPANY, Inc.
114 LIBERTY STREET, NEW YORK, N. Y.

SEARCHLIGHT SECTION

Second Hand Equipment

FOR RENT OR FOR SALE

Floating Pile Driver

all in good condition. Practically new—now working on Delaware River.
Scow—65 ft. x 22 ft. 4 in. x 6 ft. 0 in.
Ways—46 ft. above deck and extending down 1 ft. below water.
Hammer—3800 lb.
Follower Block—1100 lb.
7 in. x 10 in. Engine and Boiler.

Will sell completely rigged ready for work. Condition guaranteed.

LOUIS J. SIELING
171 Madison Ave., New York City

CRUSHERS

FOR SALE

No. 9 Gates, Style "K"
No. 7½ Austin
No. 6 Gates, Style "D"
2—Symons, 36-in. Disc Crushers
1—Symons, 48-in. Disc Crushers

Immediate Shipment

WILLIS SHAW
239 Railway Exchange Building, Chicago

LAKEWOOD

CONCRETE MIXER

No. 28 (1-yd. mixed concrete) direct connected to vertical steam engine.

Condition equal to new.

BROWN & SITES CO.
30 Church St., New York, N. Y.

Buckeye and Parsons Ditching Machines

FOR SALE OR RENT

GENERAL EQUIPMENT COMPANY
30 Church Street, New York City

FOR SALE—IMMEDIATE DELIVERY

Two Dragline Excavators

With 75-ft. Booms, 2½-cu.yd. Page Buckets. Good as new. Have excavated only about 300,000 cu.yds. Work completed and can give immediate delivery. Machines can be inspected in northern Minnesota.

SECURITY DREDGING & CONSTRUCTION CO.
710 Sykes Block, Minneapolis, Minn.

FOR RENT—FOR SALE

Portable Boilers

Hoisters, Air Compressors, Concrete Mixers, Centrifugal Pumps, Diving Outfits, Rock Drills, Derricks, Pile Drivers and General Contractor's Equipment, both Steam and Electrically Driven.

MARVIN BRIGGS, Inc., 167 Sixth St.
Tel. South 5471 Brooklyn, N. Y.

FOR SALE

PUMP and ENGINE

1—5¼ x 8-in. Deming single-acting, Triplex Pump, and 1—30 H.P. Otto Gasoline Engine.

Both used a short time and are in splendid condition.

M. I. EVINGER
514 Farnam Bldg., Omaha, Nebr.

12-INCH HYDRAULIC DREDGE

Fully equipped. Electric light plant, Pontoons, Pontoon pipe, shore pipe, rubber sleeves and bands, coal scow with mast and boom. Double drum, hand power with wire blocks and falls. Galley and sleeping quarters for eleven men. All in first-class condition, ready to go into commission.

A. R. Powley Dredigng & Construction Co., Inc.
P. O. Box 65, Kingston, N. Y.

TRENCH MACHINES

FOR SALE

Buckeye Gasoline Trench Machine, cuts 15 and 18 in. wide, 5½ ft. deep, equipped with round traction wheels, shipped Sept., 1914, used one short job.

Buckeye Steam Trench Machine, with boiler and engine, cuts 11½ in. wide, 4½ ft. deep, equipped with round traction wheels.

Buckeye Stream Trench Machine, with boiler and engine, cuts 15 and 18 in. wide, 5½ ft. deep, equipped with round traction wheels.

MARINE METAL & SUPPLY CO.
167 South St., New York City.

STIRLING BOILERS

5—250 H.P. Stirling boilers, hand fired, in good condition with fittings, stacks and feed water heater, each having superheater and Parsons forced draught system.
1—10-ton Paxon Cupola, with air elevator blower and air pipe.
1—American Blower Co.'s heating system, comprising vertical engine, direct connected to 10 ft. fan and several thousand feet steam pipe coil.
1—Crane runway, one hundred ft. long, 20 and 30 in. girders, supported by 10 x 10 in. steel columns.

Wire—Phone—Write

Contractors' Machinery & Supply Co.
509-11 Wabash Bldg., Pittsburgh, Pa.

FOR SALE

Electric Deep Well Pumping Outfit

with or without 75-hp., 108-volt, Direct-Current Motor, 500 to 600 gallons capacity, centrifugal turbine pump, 9 stages, depth 175 to 225 feet below the surface, 1150 revolutions per minute. Largest diameter of pump 14½ in. All nickel steel shafting, cast steel flanges, galvanized wrought iron 9-in. pipe in 8-foot sections. Approximate weight, 16,000 pounds. American Well Works make. Practically new and first-class. Will be sold due to receding of water in Chicago territory at very reasonable price by

PETER SCHOENHOFEN BREWING COMPANY, Chicago, Illinois

Correspondence solicited.

TRIPLEX PUMP

11 x 14 Goulds double acting, triplex pump, brass fitted, used about three months, absolutely good as new; will be furnished with or without two 50 H.P. Nash vertical 3-cylinder gas engines.

HACKLEY MORRISON, Richmond, Va.

FOR SALE—TO RENT

DITCH EXCAVATOR

A No. 00 Austin, at Admiral, Md.

TRENCH EXCAVATING CORPORATION
Care of Benjamin Catchings, Washington, D. C.

FOR SALE

10-in. Morris Centrifugal **PUMP**, direct connected with engine. Complete.

6-in. Morris Centrifugal **PUMP**, direct connected with engine. Complete.

9-ft. Marsh-Capron **MIXER**, with gasoline engine.
25 H.P. **BOILER**.

MIAMI CONSTRUCTION CO., Sidney, Ohio

SEARCHLIGHT SECTION

Second Hand Equipment

DELIVERY — QUALITY — PRICE

Your choice of equipment will be based on these three factors. We wish to prove to you, as we have already proved to many, that we can give you entire satisfaction. Send today for our list of equipment giving description, location and prices. Here are a few of the items:

LOCOMOTIVES

Quantity	Make	Description
11	Porter	36 in. gauge, saddle tank locomotives, 10 x 16, built 1905-6, all overhauled and in good working order
1	Davenport	36 in. gauge, saddle tank locomotive, 11 x 16 all overhauled and in good working condition. Shop, No. 833, built 1908
2	Porter	Standard gauge, saddle tank locomotives, 12 x 16, built 1912, in first-class condition.
1	Vulcan	Standard gauge saddle tank locomotive, 12 x 16, new boiler 1913.

CARS

60	H. S. Kerbaugh	36 in. gauge, 4 c.y., 1-way dump cars, all overhauled
12	H. S. Kerbaugh	36 in. gauge, 1 c.y. concrete dump cars, with articulated truck, all steel, new
4	H. S. Kerbaugh	36 in. gauge, 1 c.y. concrete dump cars, with articulated truck, all steel, used
10	Oliver	Standard gauge, 6 cu.yd. dump cars
4	Continental	Standard gauge, 6 cu.yd. dump cars
4	H. S. Kerbaugh	Standard gauge, 8 cu.yd. dump cars
5	H. S. Kerbaugh	Standard gauge, 10 cu.yd. dump cars

TRACTION ENGINES AND ROAD CARS

2	Buffalo-Pitts.	Traction engines, 50 H.P., cyl. 7 x 10, built 1910 in good repair
1	Buffalo-Pitts.	Traction engine, 35 H.P., cyl. 6½ x 6½
6	Buffalo-Pitts.	20-ton Platform wagons, built 1910

DERRICKS

10		Guy derricks, masts 80 ft. to 92 ft., booms 80 ft. to 85 ft., square and octagon sticks, castings 18 in. and 20 in. with steel bull wheels without guy, hoisting or swinging lines
[5000 ft.		1¼ in. steel yacht guy in 100 ft. lengths, with sockets
4	Stiff leg, twin,	traveling derricks, masts, 18 in. x 18 in. x 30 ft., booms 16 in. x 16 in. x 65 ft
3	Stiff leg, twin,	traveling derricks, masts 18 in. x 18 in. x 30 ft., booms 16 in. x 16 in. x 55 ft.
		All above traveling derricks, 30 ft. gauge, mounted on 22 in. double flanged wheels, without engines or lines
50,000 ft.		¾ in. guy

ENGINES

1	Fairbanks	Gas engine, 8 H.P., vertical, mounted on wheels, with 2 fly wheels and 2 pulleys, with gasoline tank and water tank. Shop No. 9471, in good repair
1	Nagle	Stationary engine, 10 x 12, Shop No. 2676
1	Woodbury-Booth	Stationary engine, 8 x 14, 30 H.P., no number, complete, in good repair
1	Chandler-Taylor	Stationary engine, 11 x 15, 60 H.P., complete, Shop No. 5518
1	Russell	Stationary engine, automatic, 11 x 14, 65 H.P., complete, Shop No. 01273
2	Westinghouse	Stationary engines, automatic, 10 x 9, 65 H.P., Nos. 2688-89, complete in all parts, in strictly first-class repair
2	Lambert	Hoisting engines, 7 x 10 D.D., D.C. Skeleton, Shop Nos. 1990 and 2371

Quantity	Make	Description
1	Rawson-Morrison	Hoisting engine, 8½ x 10, D.D. ,D.C., skeleton, built 1901, Shop No. 12744, link motion, reversing
2	Flory	Propelling engines, 8½ x 10, D.C., skeleton, Shop Nos. 4598 and 5477
1	Barber	18 H.P., D.C., gas engine, not complete
2	Flory	Hoisting engines, 50 H.P., No. 372, spec. compound geared, fitted with link motion D.C., S.D., 48 in. x 24 in., Shop Nos. 4524-5

ELECTRICAL PLANT AND EQUIPMENT

4	Ingersoll-Rand	Electric wagon rock drills, Nos. 14, 25, 26 and 27, operated by motors, 3-phase, 60-cycle, 220-volt
17	Ingersoll-Rand	5F electric pulsator rock drills, with pulsator, controller and tripods, 5 H.P. motors, 3-phase, 60-cycle, 220-volt
2	Buffalo	Triplex pumps, 5½ in. x 6 in., with Westinghouse 7½ H.P. motor, 3-phase, 60-cycle, 220-volt
1	Morris	Two-stage service pump, 6 in. suction, 4 in. discharge, direct connected to G. E. 25 H.P. motor No. 425982, type I-2-25-1500-K 220-volt, 25-cycle
1	Morris	Ditto, with motor No. 145983
1	Morris	Vertical 3 in centrifugal pump, direct connected to G. E. vertical 5 H. P. motor No. 425965, type I-2-5-A-1500, form K, speed full load 1450 amps. 1.4, volts 2200, cycles 25
1	Morris	Ditto, with motor No. 425986
2	Flory	Cableway engines, with 300 H.P. motors, 3-phase, 60-cycle, 440-volts, with carriage, fall block, head tower sheaves, fall rope carriers, top tower castings, but without hoisting or hauling lines.
6	Flory	75 H.P. electric hoists, 2-drum, with 11 H.P electric swinging winches, motors 3-phase, 60 cycle, 220-volt
2	Williamson	75 H.P. electric hoists, 2-drum, with 7½ H.P. electric swinging winches, motors 3-phase, 60-cycle, 220 volt
5	Maine Elec. Co.	75 H.P. electric hoists, 2-drum, with 7½ H.P. electric swinging winches, motors 3-phase, 60-cycle, 220 volt

Other Electrical Equipment on List

FLOATING EQUIPMENT

1—Dipper dredge "Pontiac" hull, 95 x 36 ft., boom 45 ft., dipper stick 46-ft., dipper, 4½ cu.yd. Complete and in first-class condition.

1—Derrick boat "Atlas" hull, 180 x 36 ft. 2A frame derricks, booms 84 and 75 ft., 25 ton capacity each. Complete and in first-class condition.

1—Tug boat "Susquehanna," hull 58 x 14 ft., 4 in.

LOCOMOTIVE CRANES

1—10-ton Industrial, 8 wheel locomotive crane, 40 ft. boom, equipped for bucket work.

SUPPLIES

"Large stock of new, miscellaneous supplies and hardware."

1
LIST OF EQUIPMENT FOR SALE
EMPIRE ENGINEERING COMPANY, Inc.
6 CHURCH ST. NEW YORK

THESE AND MANY OTHER ITEMS, INCLUDING STEAM SHOVELS, STEAM AND HORSE ROLLERS, AIR COMPRESSORS AND RECEIVERS, CAGES AND MINE COLUMNS, DRILLS OF ALL KINDS, PUMPS, BOILERS, BUCKETS, CONCRETE MIXERS, CEMENT BAG SHAKER, STONE CRUSHER PLANT AND WAGONS ARE TO BE FOUND IN OUR LIST. SEND FOR IT TODAY.

Empire Engineering Company, Inc.
CONTRACTORS—ENGINEERS
Continuing the business carried on by
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6 Church Street, New York City

SEARCHLIGHT SECTION

Second Hand Equipment

GOOD EQUIPMENT AND GOING FAST

LOCOMOTIVE CRANES

1—15-ton Industrial, 4-wheel, 40-ft. boom, 15-ft. extension.
1—20-ton Ohio, 8-wheel, 40-ft. boom.

DUMP CARS

29—Western, 12-yd. M. C. B.
30—K. & J. 16-yd. (all steel).
100—4-yd. 36-in. gauge, Western.
16—1½-yd. Western, 24-in. gauge.
40—1-1½-yd. Koppel, 24-in. gauge.
10—30-ton, 4-wheel, S. T.

LOCOMOTIVES

6—26-ton, 4-wheel, S. T. Vulcan.
2—21-ton, 4-wheel, S. T. Vulcan. (36-in. gauge)
5—10 x 16 Porters, S. T.
5—10 x 16 Vulcans, S. T.
1—11 x 16 Davenport, S. T.
2— 9 x 14 Vulcans, S. T.

STEAM SHOVELS

2—70C Bucyrus, like new, 2½-yd.
2—70-ton Bucyrus, fine, cheap.
2—Marion 75, 3½-yd. dipper.
1—Marion 41, RR, 1½-yd.
1—40C Bucyrus, RR, 1½-yd.
1—40 Marion, 1½-yd. traction.
1—18B Bucyrus, ⅞-yd. traction.
1—A-1 Thew, ⅞-yd. traction.
2—28 Marion, ¾-yd. traction.

MISCELLANEOUS

1—3-ton, 24-in. ga. Plymouth locomotive.
1—7 x 12 Davenport, 24-in. ga.
5000 ft. of 16- and 20-lb. track.
80 tons, 30-lb. relayers.
15 tons, 16-lb. relayers.
100 steel flat cars, 36-in. ga.
1—O & S C. S. bucket, 1-yd.
1—Hayward O. P. bucket, ¾-yd.
1—Traveling derrick
39—100 lb. of 25-lb. rail.

Will rent with privilege of purchase. *Send Us All Your Inquiries*

CONTRACTORS SERVICE COMPANY, 48 Church Street, N. Y. City, N. Y.

FOR SALE

1—Wilson-Snyder Compound **Steam Pump**, size 12 x 8 x 18 in.
1—Ingersoll-Rand **Air Compressor**, Class A-1 Steam Cyl., 12 x 12 in. Air Cyl., 14¼ x 14 in.
1—Deane Triplex **Pump**, 7½ x 10, 6-in. Suction, 5-in. Discharge, for 225 lb. working pressure.
1—3000 lb. Pioneer **Steam Roller**.
1—Ingersoll-Rand **Drill** No. 1.
6—Arthur Cable **Dump Cars**.
2—¾-yd. Side **Dump Buckets**.
1—**Keystone Drill** No. 2-A.
1—45 H.P. **Nagle Boiler**, Horizontal.
1—No. 4 Carpenter **Feed Pump**.

JOHNSTOWN WATER CO.
332 Locust St., Johnstown, Pa.

FOR SALE

For immediate delivery

1—Epping-Carpenter 16 x 10 x 24 Horizontal Duplex, heavy pressure boiler feed

PUMP

Never been used on account of changed conditions.

The Lorain County Electric Co.
Elyria, O.

FOR SALE

CABLE

½- and ¾-inch, various lengths, in first-class condition.

DALLETT & COMPANY
413 Harrison Bldg., Philadelphia, Pa.

AIR COMPRESSORS—100 lb.

2000 cu.ft. Ingersoll-Corliss, steam, 2 stage air.
1050 cu.ft. Chicago Pneumatic, 2 stage, duplex, steam, 2.
707 cu.ft. Norwalk, double tandem, steam.
526 cu.ft. Ingersoll-Rand, 2 stage, duplex, steam, 2.
375 cu.ft. Ingersoll, 2 stage, belt driven.
180 cu.ft. Ingersoll-Rand, N. E. 1 belted.
180 cu.ft. Blaisdell, enclosed frame, belted.

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25 Church St., New York, N. Y.

SPECIAL

Air Compressor

Ingersoll-Rand, Class NE-1, 10 x 10 in., 179 cu.ft. per minute, with A.C. Motor, 60-cycle 3-phase, 220 volts.

Electric Hoist

Lidgerwood, size No. 528, 22 H.P., double drum; Motor 60-cycle, 3-phase, 220 volts, with winch heads and foot brakes.

Above units in first-class condition. Prompt, delivery

E. C. SHERWOOD
50 Church St., New York, N. Y.

TRAVELING CRANES

5-ton **Case, 47-ft. span, 3 motor, 220 V., D.C.**
10-ton **Shaw, 65-ft. span, 3 motor, 220 V., D.C.**
15-ton **Shaw, 55-ft. span, 4 motor, 220 V., D.C.**
Auxiliary Hoist, 3½ ton.

A. G. SCHOONMAKER & SONS
25 Church St., New York, N. Y.

PIPE AND WIRE ROPE FOR SALE

6000 ft. 4 in.; 15,000 ft. 2, 2½ and 3 in. galvanized iron pipe, 60 tons Bell and Spigot cast iron Water Pipe, 4 in. and 6 in., with hydrants, valves etc.; three—66 x 43 ft. 6 in. round closed tanks, for pressures or storage; 10,000 ft. ¾ and 1 inch NEW Galvanized Wire Rope; ¾, ⅞, 1⅛, 1¼, 1½, 1¾, 2 and 2¼ in. Wire Rope, on reels, for guys, skidding cables or hoisting, lengths from 250 ft. to 8000 ft.; fine condition; four 8 in. Automatic Steam Valves, and lot 8 in. bent wrought pipe.
Easton Machinery Co., Drake Bldg., Easton, Pa.

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Send for complete list with prices. Used instruments bought, sold, rented and exchanged for new.

THE ENGINEERING AGENCY, Inc.
Monadnock Bldg., Chicago.

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999 New & Used Surveying & Scientific Instruments

Rented, Bought, Sold & Exchanged

Architects & Engineers' Supply Co.
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5 to 50 Ton

STEEL DERRICKS

Of All Types

Brand New—Quick Delivery—Exceptionally Fine Design—All Cast Steel Fittings—Equipped either for Hoisting or Bucket Use.

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KERN-HUNTER, INC.
208-210 Wells St., Milwaukee, Wis.

HOIST

1—Lambert, 500 lb. capacity at 300 ft. per min., single line, single drum, 30 x 36 in., face smooth, geared to 68 H.P., 250 or 500 volt, D.C. Motor with controller practically new. Used 3 months.

ENGINES

1—12 x 36 in. Hamilton-Corliss
1—16 x 36 St. Louis Corliss
1—22 x 48 St. Louis Corliss
2—22 & 44 x 48 Hamilton C. C.

BOILERS

72 in. x 22 ft., 125 lb. 2—72 in. x 18 ft., 125 lb. 72 in. x 16 ft., 140 lb. 2—68 in. x 16 ft., 115 lb. 52 in. x 14 ft., 125 lb. 4—360 H.P., Heine type. 165 lb.

Motors, Generators, Units, all sizes.

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417 Pine St., St. Louis, Mo.

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Send for New Bargain List.
WILLIAMS, BROWN & EARLE, INC.
918 Chestnut St., Philadelphia, Pa.
Department D

SEARCHLIGHT SECTION

Second Hand Equipment

We Equip Plants in Whole or in Part on Rental or Sales Basis

In addition to the following, all of which is ready for use and immediate shipment, we have a large amount of equipment now under repair or shortly to be released from rental.

Locomotive Cranes

1—35-ton, type "J" McMyler, 70-ft. boom, 8-wheel, double drum, four months old.
1—25-ton, 8-wheel McMyler, 50-70-ft. boom, double drum, new.
1—15-ton, 8-wheel Brown Hoist, 50-ft. boom, double drum, first-class condition.

Steam Shovels

1—Marion 91, 4-yd. dipper.
2—Bucyrus 70-C, 2½-yd. dipper.
1—Marion 70, 2½-yd. dipper.
2—Marion 60, 2¼-yd. dipper.
1—Type "B" Erie Revolving, ¾-yd. dipper.
1—Marion 28 Revolving, ¾-yd. dipper.

Locomotives

1—40-ton O-4-2 type, standard gauge, saddle tank.
6—10 x 16 dinkeys, 36-in. gauge.
3— 9 x 14 dinkeys, 36-in. gauge.

Cars

60—12-yd. Western air dump, std. gauge.
125— 4-yd. Western steel beam, 36-in. gauge.
50— 4-yd. Western, wood beam, 36-in. gauge.
14— 4-yd. Continental, wood beam. 36-in. gauge.

Compressor

1—Ingersoll-Rand Class AA-2, steam driven, 879 cu.ft. capacity.

Hoists

1—3-drum, 7¼ x 10 Mundy with swinger, no boiler.
1—3-drum, 6¼ x 10 Mundy, Ohio boiler and swinger.
3—1-drum, 6¼ x 10 Mundy, skeleton.
1—1-drum, 6¼ x 10 Byers, skeleton.
1—2-drum, 8 x 12 Lambert, skeleton.
1—3-drum, 8¼ x 10 American, with boiler and swinger.
1—3-drum, 6¼ x 10 Lambert, with boiler.
1—3-drum, 10 x 12 Mead-Morrison with boiler.
1—2-drum, 9 x 10 Lidgerwood Cableway Engines.

Cableways

1—Lidgerwood Cableway, complete except towers and boiler, 9 x 10 engine, 1125 ft. span, 3 ton capacity.
2—Lengths 2½-in. Plow Steel, 6-37 Cable, each 2250 ft. long.

Clam Shell Buckets

2—1 -yd. Owen, with teeth.
5—½-yd. Owen, with teeth.
2—1½-yd. Owen, with teeth.
1—1 -yd. Blaw.

Derricks

3—Traveling stiff-leg, 10 x 12 x 40-ft. boom, 12 x 12 x 15-ft. mast, 8-ft. bull wheel, 14-ft. gauge.
1—Stiff-leg, 12 x 12 x 55-ft. boom, 14 x 14 x 30-ft. mast, 8-ft. wheel.
1—Stiff-leg, 12 x 14 x 65-ft. boom, 14 x 14 x 40-ft. mast, 14-ft. wheel.
1—Guy, 14 x 14 x 57-ft. boom, 14 x 14 x 58-ft. mast.
1—Stiff-leg, steel boom, 80 ft., 16 x 16 x 50-ft. mast, legs 12 x 12 x 14-ft. bull wheel.
1—Guy, 12 x 12 x 60-ft. boom, 12 x 12 x 60-ft. mast, 13-ft. wheel.
1—Stiff-leg, 14 x 14 x 70-ft. boom, 16 x 16 x 40-ft. mast, legs 12 x 12, 14-ft. wheel.
1—Guy, 12 x 12 x 75-ft. boom, 14 x 14 x 76-ft. mast, 14-ft. wheel.

Boilers

6—Erie City Vertical, 15 H.P.
1— 30 H.P. Nagle, locomotive type, portable.
3— 15 H.P. O & S Vertical.
1— 20 H.P. Nagle, vertical, Ohio std.
2— 35 H.P. O & S Horizontal, locomotive type, portable.
1— 15 H.P. Gem City, vertical.
1— 8 H.P. Erie, vertical.
1—100 H.P. Nagle, locomotive type.

Concrete Towers

2—105-ft. Lakewood, complete with ½-yd. receiving and discharge hoppers.
150 ft. Lakewood Chute.
1—140-ft. Insley Tower, complete with 18-ft. hoist and 30-ft. hopper.
240 ft. 10-in. Chute.

Concrete Buckets bottom dump

5—27½-ft. Lakewood Eclipse.
2—21 -ft. Lakewood Eclipse.
4—39 -ft. Steubner, pin controlled.
3—32 -ft. Steubner, pin controlled.
4—30 -ft. Insley.

Road Rollers and Traction Engine

1— 8-ton Buffalo-Pitts Tandem Roller.
1—10-ton Monarch, 3-wheel Roller.
1—10-ton Buffalo-Pitts Traction Engine.

Pumps

2—No. 8 Swaby Centrifugal, 10-in. suction, 8-in. discharge, direct connected to engine.
3—No. 2 Emerson.
3—Emerson, Jr.
1—No. 5 Emerson.
1—No. 4 Emerson.

Union Arcade, Pittsburgh, Pa.

H KLEINHANS CO.

SEARCHLIGHT SECTION

Second Hand Equipment

FOR SALE

1—**Mack Truck,** 5-ton stripped body.

1—**Saurer Truck,** 6-ton stone side dump body flange wheels for 4 ft. 8½ gauge.

4000 lin. ft. ¾-in. square "Slick" **Deformed Bars,** P.S.C., O.K., reinforced steel, 26 ft. 4 in., 7 ft. 2 in. and 7 ft. 4 in. lengths.

I Beams

20-in. I Beams, 20 in. x 28 ft. x 65 lb.—1820 lb. 6 in. flange, ½-in. web.
15-in. I, 15 in. x 23 ft. x 42 lb.—966 lb. 5-in. flange, 7/16-in. web.
24-in. I, 24-in. x 17 ft. x 80 lb.—1306 lb. 7-in. flange, ⅝-in. web.

4600 lin. ft. **Track, 25-lb. Rail, Two Turnouts,** complete.

4—**Koppel Cars,** 24-in. gauge, 1½-yd. water measure.

1—**Maxwell Car,** touring body, five passenger, first-class condition, 1916.

5000 lin. ft. of No. 14, double stranded waterproofed **Copper Wire,** with sockets, every 25 to 50 ft.

4—Standard gauge, 8 x 12 ft. skeleton frame **Rail Cars,** 10 ton capacity.

1500 lin. ft. ½-in. **Wire Cable.**

1—Corrugated **Steel Oil House,** 4 x 8 x 6 ft.

4—Ground throw **Hand Levers.**

1—12 x 12 in. x 25 ft. **Yellow Pine Boom** for Derrick.

Anyone wishing to get in touch with us regarding the above can do so by either calling up our Field Office at Beach and Varick Sts. (telephone Franklin 3413) or the Main Office at 220 Broadway, New York, N. Y. (telephone Cortlandt 1884).

ENGEL & HEVENOR

IMMEDIATE SHIPMENT

HOISTING ENGINES

1— 6 x 8-in. D.C., single drum skeleton.
2— 6 x 8-in. D.C., D.D., with boilers and swingers.
3—6½ x 10-in. D.C., D.D. with boilers, and swingers.
4—7¼ x 10-in. D.C., D.D., with boilers
4—8¼ x 10-in. D.C., D.D., with boilers.
2—8¼ x 10-in. D.C., triple drum with boilers.
1—8¼ x 10-in. D.C., triple drum skeleton.
1—10 x 12-in. D.C., triple drum, with boiler.
1—10 x 12-in. D.C., D.D., with boiler.
1—10 x 12-in. D.C., single drum with boiler.
2—45 H.P., double drum Maine Electric, with swinging gear.

BOILERS

2—100 H.P. Penn. return tubular.
2— 70 H.P. Locomotive type, on wheels.
1— 50 H.P. Locomotive type, on wheels.

DERRICKS

2—Travelers, mast 14 x 14-in. x 35-ft. boom 12 x 12 in. x 65 ft.
1—Traveler, mast 14 x 14 in. x 25 ft. boom 12 x 12 in. x 40 ft.
1—Traveler, mast 10 x 10 in. x 20 ft. boom 10 x 10 in. x 30 ft.
1—Stiff leg, 75-ft. boom, 42-ft. mast.
2—Stiff leg, 50-ft. boom, 35-ft. mast.
2—Stiff leg, 60-ft. boom, 40-ft. mast.
1—Stiff leg, 40-ft. boom, 30-ft. mast.
3—Guy, 60-ft. masts, 60-ft. boom, timbers 14 x 14.

COMPRESSORS

1—McKiernan straight line, 20 x 20 x 24 in.
1—McKiernan straight line, 16 x 16 x 18 in.

GRAB BUCKETS

2—Williams, 1-yd., single line.
2—Hayward, ¾ yd.
2—Hayward, 1 yd.
3—Hayward, 1½ yd.

STANDARD GAGE CARS

25—50,000 lb. capacity Flat Cars.

LOCOMOTIVES

1—35-ton, 4-wheel separate tender Switching Locomotive.
1—35-ton, 4-wheel Saddle Tank Locomotive.

LOCOMOTIVE CRANES

1—Interstate, 20-ton, 52-ft. boom, 8-wheel, arranged for clamshell.
1—American Hoist & Derrick, 20-ton
1—Williamson, 5-ton.
1—Brown Hoist, 5-ton.
1—Link-Belt, 10-ft. gage, 4-wheel electric, 58-ft. boom.

HOISTING MACHINERY CO., 50 Church Street, New York City

VULCAN HAMMERS

1 No. 2—1 No. 3

HOISTING ENGINES

2—7x10 DD., D.C., with boilers

ELECTRIC HOIST

1—100 H.P. Thomas Elevator

GRANVILLE SUPPLY COMPANY
915 Olive St., St. Louis, Mo.

Locomotive Cranes
Steel Derricks
Hoisting Engines
Wire Rope

WIRE—PHONE—WRITE

T. H. LETSON COMPANY
50 Church St., New York, N.Y.

HOISTING and SWINGING ENGINES

1—Lidgerwood, 14 x 18 ft., D.C., 3-tandem drums, suitable for cable way.
1—Shannon, 7¼ x 10, D.C., D.D., with boiler.
1—Mundy, 6¼ x 10, D.C., D.D. Skeleton.
2—Mundy, 6¼ x 10, D.C., D.D., with boiler.
1—National, 5½ x 10, D.C., D.D., with boiler.
1—Lidgerwood rotary swinging engine.
1—Mundy, 4½ x 6, swinging engine.

STEAM SHOVELS

1—65-ton Bucyrus, 2½-yd. dipper.
1—No. 1 Thew Traction, ⅝-yd. dipper.

HENRY A. HITNER'S SONS CO.
Station K, Philadelphia, Pa.

HOISTS

Compressors - Boilers - Mixers
Derricks - Cableways
For Sale or Lease
HOISTING ENGINE SALES CO.
Grand Central Station, New York

LOCOMOTIVE CRANE

1—20-ton, 8-wheel McMyler-Interstate, M.C.B. trucks, 50-ft. boom, immediate delivery.

Other Cranes, 5 to 30 tons capacity.

ROCK CRUSHER

1—No. 5 McCully Gyratory.

Also other Equipment. Advise us as to your requirements.

HERBERT GIVIN COMPANY
30 Church Street, New York, N. Y.

STEAM HOISTS

8 x 10-in. single cylinder, single drum, skeleton
7 x 10-in. double cylinder, D.D., Carlin skeleton
6¼ x 10-in. double cylinder, D.D., Mundy skeleton
5 x 8-in. double cylinder, D.D., Carlin, with boiler

ELECTRIC HOISTS

40 H.P., A.C. single drum Mundy, in stock, drum 18 in. dia., 30 in. long with swinging drum
20 H.P. A.C., double friction drum, 14 x 20 in.
25 H.P., single friction drum
Single or double drum Electric Hoists for motors, rope pull capacities 9000, 8000, 5000 and 2000 lb.

JOHN H. CARLIN MACHINE CO.
Sandusky-Lacock Sts., Pittsburgh, Pa.

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Second Hand Equipment

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Of Large Plant for Immediate Service

The contractor's greatest difficulty and most important factor today is to get first-class plant, in perfect working condition, ready for use and immediately available. Here the difficulty is solved. We have assembled one of the finest and most complete plants in the country. Everything is here for industrial plants, railroad construction, municipal, state or federal work of any kind.

LOOK AT THE LIST AND PREPARE FOR A BIG OFFENSIVE

First Line Equipment:—

For heavy excavation and concrete work. A rare opportunity for Industrial Plants, Contractors, Railroads, Municipal, State or Federal Departments, requiring A-1 complete equipment, ready for immediate shipment, and in absolutely first-class working condition for immediate service. All the plant listed below at Delaware, Ohio, on the Pennsylvania Railroad.

STEAM SHOVELS:—

2—70-C Bucyrus, equipped with air pump and lighting plant.
2—Model 60 Marions. Complete list shovel repair parts, including 2½-yd. manganese dipper for Marion 60.

CARS—Dump:—

55—4 -yd. heavy duty Westerns.
18—4 -yd. standard Westerns.
12—2 -yd. standard Westerns.
4—1½-yd. V-shaped Koppel.
2—1 -yd. K. & J.
4—30-ton rail trucks.
5—Small rail and push cars. Complete list repair parts.

LOCOMOTIVES:—

7—10 x 16 Vulcans, 36-in. gage.
2—10 x 16 Porters, 36-in. gage.
1—11 x 16 Porter, 36-in. gage.
1— 7 x 12 Vulcan, 9-ton, 24-in. gage, steel cab. Complete list repair parts.
Given 225 lb. hydrostatic test under I.C.C. inspector supervision.

CONCRETE:—

3—¾-yd. steam Koehring traction, mixer, side loaders, Ohio standard boilers.
1—½-yd. Marsh-Capron as above.
1—¾ steam Ransome on wheels.

TOWERS:—

2—Insleys with chutes, complete.

HOISTING ENGINES:—

1—6 x 8-in. Byers, D.D., with Boiler.
1—6 x 8-in. O. & S., D.D., with Boiler.
1—8 x 10-in. Flory 3-D, with Boiler.
1—No. 4 Mead-Morrison Swinger.

BOILERS:—

2—30 H.P. Vertical, Ohio & Mass. Standard.
1—25 H.P. Horizontal portable.
1—18 H.P. Vertical.
1—12 H.P. Vertical.

DERRICKS:—

1—Stiff Leg.
6—Guy Derricks, with bull wheels, Guy wire, hoisting rope, derrick fittings.

DRILLS—Steam:—

2—U. S.-3 Sullivan with tripods.
9—U. F.-11 Sullivan with tripods.

PUMPS:—

2—Blake, 4½, 2¾ x 4.
2—Crawford-McCrimmon, size 4½.
1—Cameron 3-B, 6 x 4 x 7.
1—Advance duplex, 7 x 4½ x 8.
1—Gasoline-driven, 3-in. centrifugal.
2—Gould gasoline driven, 2-in. suction.
1—Gould hand feed pump.
1—Worthington, 6 x 4 x 6.

CLAM SHELL BUCKETS:—

1—¾-yd. type C Williams.
2—¾-yd. Owens, one with teeth.
1—¾-yd. Haas with teeth.

DUMP BUCKETS:—

1— ½-yd. Lakewood, controllable bottom.
3—1 -yd. round Sherwood dumps.
2—1 -yd. flaring side self dumps.
4—1 -yd. cyclopean, double hinge bottom.
1—1½-yd. square dump.

AUTO TRUCKS:—

1—5-ton White, 6-cylinder dump body, Model A.T.C., at White shops, Cleveland.
1—½-ton Ford delivery.

AIR RECEIVER:—

6 ft. 6 in. x 4 ft. 6 in., 100 cu.ft. capacity.

WIRE ROPE:—

Galvanized Guy. Hoisting, 1¼, 1, ⅞ in.
Manila ¾, ⅝ in.

LUMBER—Used:—

167,000 F. B. M.
15,000—6 x 6 x 6 ties.

ROAD ROLLERS:—

1—5-ton tandem steam Buffalo-Pitts.
1—8-ton, 3-wheel American gasoline.

Rental proposition submitted on steam shovels, locomotives, derricks and concrete mixers.

UTILITY EQUIPMENT COMPANY

324 Fourth Avenue, Pittsburgh, Pa.

SEARCHLIGHT SECTION

Second Hand Equipment

I BEAMS

Fine Condition	Prompt Delivery
40—12″ Beams	10 to 11′ 9″ Long
350—15″ Beams	17 to 19′ 8″ Long
150—20″ Beams	15 to 18′ Long

Variety of other beams on hand. Send us your specifications.

TANKS

1—Open, round tank, 15′ dia., 15′ high, ¼″ plate, practically new.
25—Steel pressure tanks, 3′6″ dia. x 9′6″ long, ¾″ plate.
10—6′ dia. x 20′.
40—6′ dia. x 17″.

Many others—open and closed.

PIPE

Large stock, all sizes of second-hand pipe, re-threaded and coupled for immediate delivery.

TUBES

Seamless (New)

5 tons, 2¼″ x 7′1″
50 tons, 3¼″ x 7′1″

Lap Welded (Used)

150 tons 2¼″, 3″, 3¼″, 3½″ and 4″, 15 to 20 ft. long.

Prompt delivery.

Send us a list of your requirements.

The Perry, Buxton, Doane Co.
216 West 1st St., South Boston, Mass.

WATER PIPE

100 tons of used 12 in. cast iron water pipe.

THE PERRY, BUXTON, DOANE CO.
216 W. First St., So. Boston, Mass.

SECOND-HAND PIPE

Large Stock—All Sizes

Recut—Perfect Threads and Couplings

Also a Large Stock
Contractors' Equipment

Marine Metal & Supply Co.
167 South Street, New York

PIPE SECOND HAND

With new threads and couplings; also cut to sketch.

PFAFF & KENDALL
Ferry & Foundry Sts., Newark, N. J.

PIPE All sizes, bargain prices, second-hand and new

IMMEDIATE DELIVERIES:

8,000 ft. of 12 in. pipe
10,000 ft. of 8 in. pipe
10,000 ft. of 6 in. pipe
10,000 ft. of 4 in. pipe
15,000 ft. of 3 in. pipe

50,000 ft. of 2 in. pipe
50,000 ft. of 1½ in. pipe
100,000 ft. of 1¼ in. pipe
100,000 ft. of 1 in. pipe

Also a large stock of 16, 18 and 20 in. pipe

PIPE & CONTRACTORS SUPPLY CO., 3 Dover Street, New York, N. Y.

WE BUY AND SELL

PIPE—RAILS —FLUES

We offer for prompt delivery

5 miles 4-in. new line pipe
5 miles 3-in. new line pipe
5 miles 3 in. used line pipe

KEYSTONE PIPE & SUPPLY COMPANY
Butler, Pa.

Wrought Pipe

New and Second-Hand

GUARANTEED

Large Stock All Sizes
Special Low Prices

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INQUIRIES SOLICITED

TUBING, ALL SIZES **PIPE CUT TO SKETCH**

SECOND-HAND PIPE

Large stock, all sizes, furnished with new threads and couplings

JAMES F. GRIFFITH - 416-24 Moyer Street, Philadelphia, Pa.

PIPE

5000 ft. 10 in.
5000 ft. 6 in.
5000 ft. 3½ in.
10000 ft. 2½ in.

Also large quantity of all sizes in stock. Prompt shipment.

JAMES F. GRIFFITH
416-24 Moyer Street, Philadelphia, Pa.

PIPE

New and second-hand. With new threads and couplings. All sizes from ⅛ to 12 in. Also cut to sketch.

DAVIDSON PIPE & IRON CO.
436-40 Kent Ave., Brooklyn, N. Y.

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Wrought Iron Pipe, thoroughly overhauled, with new threads and couplings, guaranteed to give entire satisfaction. Pipe cut to sketch. It will pay to correspond with us.

ALBERT & DAVIDSON, Inc.
Oakland and Kent Sts. - Brooklyn, N. Y.

HIGHEST PRICES PAID FOR SECOND-HAND PIPE

CUTTING AND THREADING MACHINES

STERLING MACHINERY COMPANY
15 FRANKLIN STREET, NEW YORK CITY

SEARCHLIGHT SECTION

Second Hand Equipment

SPECIAL

LOCOMOTIVE CRANES

Cars, Locomotives, Steam Shovels, Etc.

For Practically Immediate Shipment

1—35-40-ton, 8-wheel truck, **Ohio Locomotive Crane**, 55-ft. boom. Strictly modern crane. Used only few months. Just like new. Immediate shipment.

1—20-ton, 8-Wheel Truck **McMyler Locomotive Crane**, 50-ft. Boom, etc. Strictly modern, used only about three months in actual service. Just good as new. Can ship at once.

1—15-ton, 8-Wheel Truck **Brown Hoist Locomotive Crane**, 36-ft. Boom, used only few months in actual service. Strictly modern. Just overhauled. First-class. Immediate shipment.

1—15-ton, 8-Wheel Truck **McMyler Locomotive Crane**, 40-ft. Boom, etc. Used very little; just like new. Right out of shops. Strictly A-1. Immediate shipment.

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1—15-ton, 8-Wheel Truck **Industrial Works Locomotive Crane**. Used very little. Just overhauled. Right out of shops. Immediate shipment.

1—42-ton Standard Gauge, 15 x 24 **Saddle Tank, 4 Driver Porter Switcher**. Strictly modern type. Little used. Right out of shop.

1—18-ton, 36-in. Gauge, 10 x 16 **Saddle Tank, 4 Driver Porter Switcher**. Little used. Just overhauled. Immediate shipment.

10—100,000 capacity **Steel Hopper Gondola Cars**. Just good as new. Little used. I C C and M C B equipment. Immediate shipment.

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30—60,000 capacity **Box Cars**, 34 ft. 6 in. long. I C C and M C B equipment. Coming right out of shops. Prompt shipments.

Marion, Thew and Bucyrus Steam Shovels, mounted on both **Traction Wheels**, also **Standard Gauge Trucks**. Different sizes. Prompt shipments. Very desirable purchases.

ALSO CONSIDERABLE OTHER EQUIPMENT.

ACT QUICKLY. ALL QUOTATIONS SUBJECT PRIOR SALE.

What Are Your Requirements? Please Telegraph, Telephone or Write Us.

A. C. TORBERT, Continental and Commercial Bank Bldg., CHICAGO

Shops and Storage Yards at Chicago

NEW

Industrial Locomotive Crane

20-ton, 8-wheel, M.C.B., double drums, 55-ft. boom, 1 yd. bucket. Prompt delivery. Last word in crane design.

Hoisting Engines, Derricks, Cars, Locomotives, Relaying, Rail, Steam Shovels, etc.

Phone, wire or write

MARYLAND EQUIPMENT & SUPPLY CO.
Baltimore, Md.

FOR SALE

5-ton, 4-wheel Brown Hoist

Locomotive Crane

Standard gauge, 30-ft. boom, thoroughly overhauled, immediate delivery. Photo on request. Others, all makes, 15, 20-ton, etc. 4 and 8-wheel.

Lennox Rotary Bevel

Shear

cap. ¾ in., brand new — Philadelphia delivery

DALLETT & CO.
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1—10-15-ton capacity crane built by Industrial Works, Bay City, Mich. Mounted on 8-wheel M. C. B. trucks, standard gage. Air brakes. Outriggers. 40-ft. boom. Equipped for bucket. First-class condition.

Immediate Shipment

Wire or Write for Price.

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525 Reading Road, Cincinnati, O.

BROWN-HOIST LOCOMOTIVE CRANE

FOR SALE

5-ton, 4-wheel, Bucket Operating Machine, standard gauge outriggers, Massachusetts and Ohio boiler. The crane is brand new, and has never been used.

Immediate Delivery Can Be Made. No Inflated Price Asked.

SQUAW ISLAND SAND & GRAVEL CORP., Buffalo, N. Y.

TRAVELING CRANE

Specialist

5-T 45-ft.; 20-T 76 ft.; 5-T 33-ft. 9-in.; 10 T 72-ft.; 15-T 55-ft. Shaw 3-motor, 220-v., d.-c.

Send requirements to

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SEARCHLIGHT SECTION

Second Hand Equipment

New Huber Steam Roller

10-ton, 3-wheel

8—1-yard, 4-wheel

Maney Scrapers

USED ONE SEASON

Jas. E. McNamara Construction Co.
Indianapolis, Ind.

Construction Equipment

HOISTING ENGINES

1—8½ x 10, 3-drum Flory with boiler
1—10 x 12, 3-drum Mead-Morrison skeleton
1—14 x 18 Lidgerwood, single drum, reversible haulage engine
1—7 x 10, 3-drum American Skeleton
2—7 x 10, single drum American Skeletons
1—7 x 10, double drum American, with Boiler
1—6½ x 10, double drum Lambert, with Boiler
1—6¼ x 8, double drum Lidgerwood, with Boiler

Various other sizes and types

PILE HAMMERS

1—Each McKiernan-Terry No. 1, 2, 3, 6 and 7

MIXERS

1—No. 106 Smith Side Loader, Gasoline Engine
1—No. 9 Chicago Cube, Side Loader, Gasoline Engine

LOCOMOTIVES

1—13-ton, 24-in. gage Shay Geared Dinkey
1—9 x 14, 36-in. gage saddle tank Locomotive
1—10 x 16 American, 36-in. gauge Saddle Tank Locomotive

CARS and TRACKS

1500 ft. 24-in. Gauge Koppel Track
15—24-in. Gauge 1-yd. Cradle Cars

BOILERS

1—100 H.P. Water Front and open bottom firebox portable

DERRICKS

Large Stock Fittings with 75,000 ft. Oregon Fir Derrick Timber

REVOLVING CRANE

1—Revolving or Gantry Crane, 50-ft. boom with 20-ft. extension.

STATIONARY ENGINES

3—800 H.P. Green compound tandem, 38 x 18 x 4 condensing
1—500 H.P. Buckeye compound tandem, 18 x 32½ x 27

ELECTRIC GENERATORS

3—500 K.W. Westinghouse D.C. Generators, 550 volts
1—300 K.W. General Electric D.C. Generator, 550 volts

BECKWITH MACHINERY CO., 108-10 W. Park Way, N. S.
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Reliable Used Equipment

Hoisting Engines

Mundy 7 x 12, 3-drum and boiler.
Mundy 6½ x 8-D.D. and boiler.
American Hoist and Derrick, 8½ x 10, 3-drum boiler and swinger.

Cranes

20-ton Browning, 60-ft. boom, bucket, drums, 4 years old.
20-ton, 8 wheel Ohio, 40-ft. boom, bucket drums, 3 years old.

Concrete Mixers

Haines complete, 4 pans.
9-E Chain Belt Paver, steam engine boiler, and distributing chute.
78 Rex Chain Belt on trucks, with gasoline engines.

Locomotives

12-ton saddle tank Vulcan, 36-in. gage.
18-ton saddle tank Baldwin, 36-in. gage.

Cars

4-yd., 36-in. gage Western cars.
4-yd., 36-in. gage Easton cars.
12-yd. standard gage Western cars.

Miscellaneous

Stiff-leg derrick, complete, 40-ft. mast, 60-ft boom, bull-wheel, 7 x 10 Mundy hoisting engine, D.D. and boiler, separate swinging engine.
½-yd. type L. Owen Clam Shell Bucket.
No. 5 and No. 7 Pulsometer Steam Pumps.
Lidgerwood Cablewood, 400-ft. span, 8½ x 10 D.C. double tandem drum engine and boiler.
Thew Traction Shovel, ½-yd.
New 40-lb. Rails.

Terwilliger Equipment Company
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FOR SALE

PIPE

20,000 ft. new 2-in. wrought iron pipe, threaded and coupled. Bargain.

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1—New Kelly-Springfield motor truck, with dump body, 6-ton capacity. Also large number spare parts. Immediate delivery.

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3—Standard gauge locomotives.

Also large assortment Boilers, Engines, Derricks, Cable and Pile Drivers.

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'Phone—Cort. 7314

FOR SALE

Fine Condition—Immediate Delivery

Morris Centrifugal Pump

direct-connected 11 x 10 double vertical engines; 12-in. suction and discharge.

48-in. Symons Disc Crusher

Steel Chutes **Pipe Covering**
Sand Settling Tank **Car Float**

Continuous Bucket Elevator

30-ft. centers; buckets 30 x 13 x 18, shafting, pulley, gears, sprockets, driving chains, belts, complete.

7 x 7 Vertical, 11 x 14 and 13½ x 13 Horizontal Engines

1612 No. 32 Broadway, New York
Phone 812 Broad

FOR SALE

2—55 H.P., D.D. **Thomas Hoists**, 3-phase, 60-cycle, 220 volt Wagner Motors.
2—No. 122 **Smith Mixers**, 1-yd. capacity, mixed material, direct connected to 20-H.P., 3 phase, 60-cycle, 220-volt Motors.
1—½-yd. **Smith No. 12 Mixer**, steam engine only, on skids.
1—10 x 20 **Indiana** Portable **Jaw Crusher**, with elevator, revolving screen and bin.
1—No. 3 **Austin Gyratory Crusher**, with screen.
1—**Lidgerwood Cableway**, 1000 ft. 2-in. Main Cable, 5-wheel carriage, tower sheaves, everything complete, except working cables.
1—Buckeye **Trenching Excavator**, steam-driven, 24 in. x 6 ft.
1—72 in. x 20 ft. H.R.T. **Boiler**, Butt-strapped, triple-riveted, with front, stack and fittings.
1—8-ton, 24-in. gage **Baldwin Locomotive**.

Gravel Washer, Hoisting Engine, Concrete Mixers, and other Equipment.

THOMAS J. LANE
240 Bushnell Bldg., Springfield, Ohio.

TANDEM ROLLER

BARGAIN

1 10-ton Overhauled

UNIVERSAL ROAD MACHINERY CO.
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1 Chain Belt

STREET PAVER

In perfect condition.

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CABLEWAY OUTFIT

1—550-ft. span, (handling 8-ton) Lidgerwood cableway outfit, with automatic dumping device, 4-drum electric hoist (no motors).

BUCKET

1—1½-yd. Hayward Clam Shell Bucket (like new)

ENDLESS CABLE ENGINE

1—6 x 8 D.C., C. W. Hunt endless cable engine.

TRUCKS

15—4-wheel steel frame C. W. Hunt coal car trucks.

BUCKET

1—1½-yd. Hayward clam shell bucket.

Boilers—all sizes and types—air compressors, etc.

H. P. BREARLEY
90 West Street, New York City.

HOISTING ENGINES

16, 20, 25H.P., D.C. D.D., with Boilers

CONCRETE MIXERS

Two 11 ft. Boss

McKENNA CO., 1851 E. 38th St., Cleveland, O.

QUARRY EQUIPMENT

No. 5 Austin **Gyratory Crusher**, Standard drive, almost new.
26 in. Austin belt **Bucket Elevator**, 67 ft. 6 in. shaft centers.
Three Ingersoll-Rand **Rock Drills**, carts, shovels, miscellaneous tools and supplies.

HACKLEY MORRISON, Richmond, Va.

RAIL

3,000 ft. 24-in. gauge, 20 lb.

KOPPEL CARS

8—1½-yd. V shape

BRACES

250-in. sewer trench braces

I-BEAMS

5—24-in., 105-lb., 32 ft. long

CONCRETE BUCKETS

1—Lakewood, 1-yd. bottom dump

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803 Hitchcock Bldg., Springfield, Mass.

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Second Hand Equipment

EXCEPTIONAL OPPORTUNITY!

We Own and Offer For Sale

Complete Modern Cement Plant

Capacity 750,000 Bbls. Annually

LOCATION, BEDFORD, IND.

Plant includes 90,000 sq.ft. Steel Buildings equipped with all machinery necessary for the making of 2,000 bbls. Cement per day.

Unlimited Raw Material, have open Quarry for both Stone and Shale.

Real Estate consists of approximately 325 Acres, including large number of Houses for help.

Most favorable Labor Conditions.

Power Plant:—1800 Kw. Curtis Steam Turbines; 2500 H.P. Water Tube Boilers; 2000 H.P. Motors, all 3 phase, 25 cycle, 440 volts.

Plant can be put in operation, full capacity, within 60 days

Storage capacity, 400,000 Bbls.

For Price and Full Particulars Address

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"Merriman" one-car

ASPHALT PLANT

9 cu.ft. batch mix, complete and in good order; capacity 2 to 3 thousand square yards pavement per day.

UVALDE ROCK ASPHALT CO.
San Antonio, Texas

IMMEDIATE SHIPMENT

2—1500 cu.ft. steam-driven

Air Compressors

1—Motor-driven, 8K, 6K, 5K

Rock Crushing Plant

Electric Shovel, Air Compressors, Electric Locomotives, all auxiliaries.

Fine Condition.

Engines, Generators, Motors.

ROSS POWER EQUIPMENT CO.
Indianapolis, Ind.

FOR SALE

WELL DRILLING MACHINERY

1—No. 3 Keystone Non-Traction Well Drilling Machine, Mass. Standard Boiler, 32-ft. Derrick, Shop No. 2941. Fully equipped.

1—No. 3½ Keystone Traction Well Drilling Machine, Mass. Standard Boiler, 32-ft. Derrick, Shop No. 3134. Fully equipped.

CONCRETE MIXERS

3—½-yd. No. 2 Marsh-Capron Rail Track Mixers, on steel trucks. Shop Nos. 699, 874, 875. Side loaders, water tanks, 10 H.P., 3-phase, 60-cycle, 220-volt. G. E. motor drive.

2—½-yd. No. 3 Milwaukee Mixers on steel trucks. Shop Nos. 948 and 949. Side loaders, water tanks, and single drum auxiliary hoists, 15 H.P., 3-phase, 60-cycle, 220-volt, G. E. motor drive.

ARTHUR DANIELS COMPANY, Inc., 21 Park Row, New York City

1—**Skid Derrick** with 46-ft. boom, 7 x 10 Lambert three drum hoist with new Michigan Standard Boiler, Stroudsburg swinging Engine, ¾-yd. Owen Bucket, type L, with teeth.

Complete set of lines and dobbie fittings.
In A-1 Condition.

$3000 f.o.b. cars, Detroit, Mich.

1—**Peerless Crane** or portable clam outfit. 40-ft. boom on flanged track wheels, 13½-ft. gauge. Complete with ¾-yd. Owen Bucket and lines.

$3000 f.o.b. cars, Cleveland, O.

1—30-60 Mogul International Combination **Gasoline and Kerosine Tractor,** in first-class condition. Has been used very little.

$1000 f.o.b. cars, Cleveland, O.

DAY & MADDOCK
Cleveland, O.

SEARCHLIGHT SECTION

Second Hand Equipment

FOR SALE

1 1917 Model "C" **Byers Auto-Crane**
1 7½ x 10 D.C., D.D. Mundy **Skeleton Hoist**
2 7 x 9 D.C., S.D. Crane **Elevator Hoists**
1 6 x 7 D.C., D.D. **Byers Hoist**, with Boiler
1 6½ x 10 D.C., S.D. **Lidgerwood**, with **Boiler**
1 5½ x 7 D.C., D.D. **Byers Hoist**, with **Boiler**
1 5 x 6 D.C., S.D. **Carlin Swinging Engine**
1 1 bag Austin Steam Equipped **Paving Mixer**
1 "Broncho" Gasoline-equipped **Mixer on trucks**
2 36 cu ft 24-in gauge **Koppel "V" Cars**
6 1-yd 24-in gauge **Koppel Scoop Cars**
2 36-in gauge **Flat Cars**
1 10-ton **Kelly Macadam Roller**
1 10-ton **Iroquois Macadam Roller**
1 600 gal **Studebaker Sprinkler**
1 9 x 15 Western **Jaw Crusher**, on wheels
1 12-ton Champion **Portable Bin**, elevator and screen
1 Galion **Scarifier**
1 ½-yd **Hayward O. P. Bucket**
2 ½-yd Ransome **Controllable Buckets**
1 ½-yd Contractors **Tip-over Bucket**
1 ½-yd **Williams "Favorite" Clam Shell**
1 5-ft **Hayward O. P. Bucket**
2 1-yd Mead **Clam-Shell Buckets**
1 Ingersoll Jackhamer **Drill**
1 8 H.P. Ideal **Gasoline Engine**
1 12-ft Bonnot **Pug Mill**
1 Type "B" **Emerson, Jr., Pump**
1 Laidlaw D.-G. **Steam Pump**, duplex 4½ x 3 x 4
1 Gordon Duplex **Steam Pump**, 4½ x 2¾ x 4

Locomotives, Steam Shovels, Cars, Derricks, Pile Drivers, etc. Everything for the Contractor, new and second-hand

Empire Engineering & Equipment Company
Empire Bldg., Pittsburgh, Pa

FOR SALE OR RENT

CONCRETE MIXERS

New and used "BOSS" mixers with gasoline engines on trucks with and without power loaders, 5 ft., 10 ft. and 15 ft. capacity. Ready for delivery, twelve machines in stock at 270 West St., N. Y. C.

BOSS MIXER

10 ft. on trucks with gasoline engine and barrow hopper.

KOEHRING STEAM STEEL PAVER

Complete No. 14 with boom. Location, New York City.

CABLE WAY

400 ft. span, complete with engine, boiler, towers and buckets.

STEAM HAMMERS

1—No. 4 Union Iron Works, weight 2600 lb. rebuilt
1—No. 3 McKiernan, rebuilt

CLAMSHELL BUCKETS

1—½-yd. Haiss rebuilt with digging teeth
1—½-yd. Hayward, a new bucket, never been used
1—1-yd. Hayward with digging teeth

HOISTING ENGINES

1—3-drum National, 9 x 12 with boiler and swinger
3—10 x 12 double cylinder, double drum Lidgerwood skeleton
2—7½ x 10 double cylinder, double drum Lidgerwood skeleton
1—8½ x 10 double cylinder, double drum Lidgerwood, with swinger
1—7½ x 10 double cylinder, double drum Lambert with boiler.

SMITH MIXER

1—22 ft. on skids with steam engines. Rebuilt and ready for any job. Location, Philadelphia.

STONE CRUSHER SCREEN

1—Manganese steel, 48 in. diameter x 18 ft. long, complete and in A-1 condition.

HOLDING DRUM

1—Hayward Holding Drum.

BOILERS

1—40 H.P. Titusville, return tubular, complete with all fittings
1—40 H.P. Farquhar locomotive boiler, on wheels, with 35 H.P. engine mounted on same

PUMPS

1—No. 4 Pulsometer, complete, rebuilt
1—No. 6 Pulsometer, complete, rebuilt
1—No. 9 Pulsometer, complete, rebuilt

RELAYERS

45 ton, 45 lb. No. 1 with joints

EDWARD EHRBAR, 270 West Street, New York City

FOR SALE

STEAM SHOVELS

2	**Marion**, standard gage, 1¼ yd	$4200
	1½ yd	5050
	Orton & Steinbreiner, 2-yd. Clam Shell bucket (almost new)	600
1	½-yd **Orange Peel Bucket**	150
1	2-yd **Orange Peel Bucket**	475
1	7-ton **Kelly-Springfield Roller** (new boiler)	900
5	12-yd steel lined **Western**, 2-way standard gage **Dump Cars**, air brake, each	1000
50	30-ton bottom dump **Gondola Cars**, standard gage, air brake, each	1200
1	10 x 16 **Porter Locomotive**, 36-in gage	2500
1	17 x 24 **Baldwin Locomotive**, standard gage	5500

Steam and Electric Hoists, Cable, Rail, etc.

Write or Wire

Suburban Engineering & Construction Co.
627 Commercial Trust Bldg., Philadelphia, Pa

FOR SALE

TRACTION SHOVEL

Thew ⅝-yd. Boiler, reflued. All new steel spur and bevel gears throughout. New shafts and bearings. Condition guaranteed identical with new.

This is a rare bargain for immediate delivery

L. G. EVERIST, *Incorporated*
Sioux City, Iowa

Clam-Shell Buckets

FOR SALE FOR RENT

New and Rebuilt

Rental on ½ and ¾ yd. Buckets $2.75 per day
Rental on 1 and 1½ yd. Buckets $3.25 per day

Send for catalog

George Haiss Mfg. Co.
140th St. and Rider Ave. New York City

FOR SALE

STEAM SHOVEL

1—Marion Model 28.

DUMP CARS

8—Western 4-yd., standard gauge, 2-way, side
6—K. & J. 4-yd., standard gauge, 2-way, side

CONCRETE BUCKETS

12—36 cu.ft. Steubner, bottom discharge

All equipment in good working order, subject to inspection, available for immediate shipment.

Address
Construction Department
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FOR SALE

Lidgerwood **Cable-way**, including 1050 ft., 2-in cable, hoisting and conveying ropes, ⅞ and ¾ in. Outfit complete, including 50 H.P. motor, direct current. All in excellent condition.

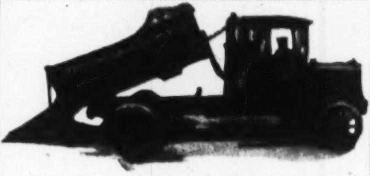
1—Direct-connected **Pump**, complete, 12-in suction, for 25-ft. head.
1—½-yd. Class "E" Hayward Clamshell **Bucket** new

I. E. SMITH, Richmond, Indiana

WIRE ROPE

¼ to 2 in. Hoisting, haulage, cableway. Tramway and equipment for one mile. Galvanized Guy Rope. Bought. Sold. Bridle and sling chain. Stone dogs (heavy). Steel and wood blocks.

John F. Meighan, 865 3rd Ave., N. Y. City



5-Ton Gramm and Garford

TRUCKS

with Steel dump bodies, Completely overhauled, Painted, New tires. Guaranteed same as new. $2900. Write for circular.

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FOR SALE

Locomotive Cranes, Derricks, Concrete Mixers, Steam Shovels, Locomotives, Cars, Rails, Hoisting Engines, Electric Hoists, Cableways.
All necessary equipment for complete plant.

JOHN M. GREENE
267 Drexel Bldg. - - - Philadelphia, Pa.

BOILER—HOIST—PUMPS

80 H.P. **Vertical** Erie City **Boiler**, 100 lb. pressure, 54 in. x 11 ft., with all fittings complete.
8½ in. x 10 ft. **Rawson-Morrison Skeleton Hoist**, D.C., D.D., first-class condition.
10 duplex **Steam Pumps**, various sizes.

A. G. SCHOONMAKER & SONS
25 Church St., New York, N. Y.

FOR SALE OR RENT

STEAM SHOVELS

Marion Model 50, 2-yd. Dipper, located Toronto
Marion Model 60, 2½-yd. Dipper, located N. Y. State

Both on standard gauge trucks.

JAMES STEWART & CO., INC., Contractors
30 Church Street, New York City

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Second Hand Equipment

R-E-D-U-C-E-D P-R-I-C-E-S

On the following equipment—Located in Greater New York, Bayonne and Newark, N. J.

AFTER COOLERS
1—Ingersoll-Rand 57-in. Iron Body, 8-in. inlet, 6-in. outlet
1—No. 5 Type V-B Ingersoll-Rand, brass tube, No. 387

BLOWERS
1—8-in. outlet, with 3 x 3 Wachs Engine
1—No. 10 Sturtevant high-pressure 12-in. outlet
1—No. 6 Sturtevant high-pressure
1—No. 7 Sturtevant exhauster
1—No. 8 Sturtevant exhauster
16-in. Blower pipe and fittings

BUCKETS
2—1-yd. Hayward Orange Peel

COMPRESSORS
1—Laidlaw-Dunn-Gordon duplex, two stage, steam driven, 700 ft. cap.
1—McKiernan, 10 x 12, steam driven, 150 ft. cap.
1—Chicago Pneumatic, 14 x 14 x 16, single stage steam driven, 427-ft. capacity

AIR RECEIVER
1—Air Receiver, 36 in. x 8 ft., with 2 [illegible] connections

DRILL SHARPENER
1—Ingersoll-Rand, D-24 Ajax

HOIST ENGINES—Electric
1—60 H.P. Lambert, D.D. and swinger, 220 V., D.C.
1—60 H.P. Lidgerwood, D.D. and swinger, 220 V., D.C.
1—40 H.P. Lambert, D.D. and swinger, 220 V., D.C.
1—40 H.P. Lambert, S.D., 800 ft. min., 220 V., D.C.

Steam
3—6¼ x 8 Lidgerwood No. 34, D.C., S.D. [illegible]

MOTORS
1—10 x 10 Lidgerwood steam S. D. shaft hoist

DRILLS
8—I-94 Ingersoll-Rand, with tripods
2—C-116 Ingersoll-Rand
9—BCR-53 Ingersoll-Rand

PUMPS
2—10 x 5 x 12 National plunger type
1—5 x 3 x 10 National plunger type
1—6 x 5¼ x 7 Blake duplex, 5-in. suc., 4-in. dis.
1—Morris Mach. Wks. Centrifugal, 4-in. suc., 4-in. dis.
1—7½ x 7½ x 6 Worthington Duplex
1—6 x [illegible] x 5 Worthington Duplex
3—4-in. Worthington turbines, 3 stage, cap. 200 gal. per min., [illegible] 40 ft. head, 2 connected to 50 H.P., 3 phase, 60 cycle, 1700 R.P.M., A.C. motors, 2 without motors, 4-in. suc., 3-in. dis.
2—2-in. Worthington turbines, do. single stage (no motor)
1—2-in. Worthington turbine, direct connected to 30 H.P., 3 phase, 60 cycle, A.C. motor
1—1½-in. Worthington do. turbine (no motor)
1—4-in. Jeanesville, 2n stage, single suc. turbine, cap. 550 gal., 300-ft. head (no motor)
1—Worthington duplex, 7½ x [illegible] x 10
4—Worthington duplex, 6 x 5¼ x 6
1—Worthington duplex, 9 x 5¼ x 10
4—Cameron, 6 x 6 x 7
4—Cameron No. 6-A, 4-in. suc., 3-in. dis.
1—Cameron No. 12
2—Cameron, 7 x 7 x 13, 4-in. suc., 3-in. dis.

SHOVEL
1—40-ton Model 20 Marion, std. gauge

SCRAPERS, ETC.
1—Climax road scraper
1—3-ton Enterprise farm roller

CONCRETE MIXERS
2—Ransome 1-yd., No. 63 (arranged for motor con.)
1—Ransome 1-yd., No. 40, with 8 x 10 engine
1—Smith No. 5, 1-yd., with 8 x 10 engine

ENGINES
5—7 x 7 Vert. Orr & Sembower (steam or air)
1—8 x 8 Vert. Orr & Sembower (steam or air)
1—4 x 5 Vert. Orr & Sembower (steam or air)

MISCELLANEOUS
12—12-in. flanged steam valves (new)
C. I. water and gas pipe
Reinforcing rods, etc.
2—36-in. x 39-ft. plate girders
51—30-in. Beth. beams, 120 lb. x 18 ft.
34—30-in. Beth. beams, 200 lb. x 18 ft.
40—24-in. Standard beams, 80 lb. x 24 ft.

THE DEGNON CONTRACTING COMPANY, Queens Subway Building, Long Island City, N. Y.

STEEL PILING

SECOND HAND

Wemlinger, 12 in. x ½ in. and $\frac{7}{16}$ in.
200 pcs. 4 ft. long
70 pcs. 6 ft. long
150 pcs. 8 ft. long
340 pcs. 10 ft. long
210 pcs. 12 ft. long
80 pcs. 13 ft. long
350 pcs. 20 ft. long
200 pcs. 24 ft. long

United States, 6 in. and 9 in. x ½ in.
56 pcs. 10 ft. long
35 pcs. 11 ft. long
169 pcs. 12 ft. long
50 pcs. 13 ft. long
} New
64 pcs. 20 ft. long
38 pcs. 21 ft. long
100 pcs. 22 ft. long
50 pcs. 25 ft. long

United States, 12½ in. x ⅜ in.
125 pcs. 14 ft. long
160 pcs. 17 ft. long
220 pcs. 18 ft. long
180 pcs. 20 ft. long
75 pcs. 24 ft. long
80 pcs. 25 ft. long

Lackawanna, 7 in. x ½ in.
380 pcs. 14 ft. long
78 pcs. 22 ft. long

Lackawanna, 12¾ in. and 14 in. x ⅜ in.
180 pcs. 12 ft. long
100 pcs. 16 ft. long
125 pcs. 18 ft. long
450 pcs. 20 ft. long
80 pcs. 24 ft. long
200 pcs. 30 ft. long
125 pcs. 35 ft. long

We are always in the market
for second-hand piling.

Wemlinger Steel Piling Company
42 Whitehall St., New York City
"The Steel Piling Exchange"

Railroad Bridges

FOR SALE

The undersigned offers for sale, at Powell, Bradford County, Pa., two bridges, one a two-span structure, the other a single-span structure, all consisting of one hundred (100) feet through Pratt truss pin connected spans. These bridges weigh approximately fifty-two (52) tons to the span, or a total of one hundred and fifty-six (156) tons in the lot.

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Williamsport, Pa.

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Shipment From Stock
1500 tons

¼ to 1¼-in. thick, O.H. soft steel. sheared and U.M. Also

Beams Channels Angles
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Concrete Reinforcing Bars

Send for List

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Send us a list of your stock with prices. We will move it for you.

Important: We are particularly interested in bar and structural size angles, also all size bars and structurals.

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500 pcs, 25-ft. Lackawanna Arched Web

First-class. Purchased Dec. 22, 1917.

If sold before moving to our E. St. Louis works will name LOW PRICE. WIRE

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Portable
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"Portable" Steel Buildings

for bunk houses, equipment storage, cement sheds, factory extensions, garages. All purposes of one story. New and second-hand. Made of galvanized steel in units of 2 feet in length. Walls 8 ft., 9 ft., 10 ft., 12 ft. height.

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SEARCHLIGHT SECTION

Second Hand Equipment

FOR SALE

Immediate Shipment

Locomotives

5—Standard gage, switcher type
1—Standard gage, saddle tank
7—Vulcan, 36-in. gage

Dump Cars

40—12-yd. Western, steel sills
7—7-yd. standard gage
100—4-yd. Western, 36-in. gage
20—1½-yd., 24-in. and 36-in. gage

Steam Shovels

3—Bucyrus, 70-C
1—Bucyrus, 60-C
3—Marion, 60
3—Bucyrus, 70
1—Atlantic, 45
2—Marion, 20
1—Lidgerwood Drag Line, 70-ft. boom

Standard gage spreader car, 3½-ton and 5-ton motor trucks, steam rollers, dump wagons, steel bridges, cable-ways, channelling machines, hoisting engines, concrete mixers, crushers, Insley tower, washing plant, buckets, conveyors, screens elevators, boilers, pumps, derricks, steam drills, stationary engines, and sundry other plant.

Write for specifications and prices.

WINSTON & COMPANY
Box 632, Richmond, Va.

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2—70-C Bucyrus.
1—Model 60 Marion.
2—No. 0 Thew Revolving.
1—Keystone Excavator.

LOCOMOTIVES

2—20 ton standard gage S. T. Americans.
2—10 x 16 in., 36-in. gage S. T. Porters.

DUMP CARS

24—4-yd., 36-in. gage, 2-way Dumps.
16—8-yd. standard gage, 1-way Dumps.

HOISTING ENGINES

1—9½ x 12 in. D.C., 3 D., Buffalo, with swinger
1—8 x 12 in., D.C., D.D. Mundy Skeleton.
2—7¼ x 10 in., D.C., D.D., Mundy with boiler.

RAILS

100 tons, 45 lb. relayers with fastenings.

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60 Tons

New 65-lb. Rails

100 Tons

New 16-lb. Rails

75 Tons

Relaying 80-lb. Rails

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1—Marion Model 20 steam shovel, 1½-yd. dipper
1—Thew steam shovel, with ¾-yd. dipper, full revolving, with independent crowding engine; standard gauge.

DUMP CARS

200—All steel Deckerville one- and two-way dump cars. Capacity ¾ to 1 yd.; 19-in. gauge.
95—Continental two-way dump cars; capacity 4 yds.; 36-in. gauge.

LOCOMOTIVES

2—5-ton Deckerville locomotives; cylinders 5 11-16 x 8 in.; 19-in. gauge.

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1—10 x 12-in., 3-drum, double cylinder Lidgerwood hoisting engine.
1—7 x 10-in. double cylinder, double drum Mundy hoisting engine.

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Approximately 200 tons, 80-lb.

RAILS

These rails have never been used.

At a Bargain.

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1—50-ton Baldwin
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1—70-ton Mogul

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End of Year Sale

1—15-ton **Browning Locomotive Crane**, 8 wheel, M.C.B., 45-ft. boom, completely overhauled
1—15-ton **Browning Locomotive Crane**, 4 wheel, 38-ft. boom, good as new
1—10-ton **Industrial**, 8 wheel **Locomotive Crane**, 40-ft. boom, M.C.B. truck
1—35-ton **Locomotive**, standard gage
1—45-ton **Locomotive**, standard gage

Complete line of Contractors', Industrial and Electrical Equipment. Write for our prices on any equipment you need.

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85 lb. A.S.C.E. Relayers

16,000 tons—with Angle Bars to match.

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Rails cut to length for structural purposes.

Frogs, Switches, Bolts, Nuts, Spikes and all Accessories.

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RAILS

all sections new as well as relaying for quick shipment.

Prices cheerfully quoted.

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3—24 in. gauge Vulcan saddle tank, weight 7 to 9 tons each.

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1—Lidgerwood-Crawford drag line, complete with hoist, 2 buckets and 70 ft. steel boom.

Chicago Machinery & Equipment Co.
Seattle, Wash.

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2—**Clayton** duplex climax, 10 x 14 x 10, air pressure 60 lb., capacity 694 cu.ft.
2—Rand straight line steam driven **Compressors**, size 12 x 12 x 16, capacity 251 cu.ft.
2—Yorke straight line steam driven **Compressors**, size 10 x 10 x 10, capacity 136 cu.ft.
1—Marsh-Capron, ½-yd. **Concrete Mixer**, boiler and engine on wheels and side loader.
1—Smith Class "B" **Tower Elevator**, with bucket 31 cu.ft.
40—Contractors' **Dump Buckets**, ¾, 1, 1½ and 2 yd.
1—Theodore Smith, 1-yd. **Orange Peel Bucket**, practically new.
1—**McMyler Clam Shell**, 1¼-yd. **Theo. Smith**, 1 yd.
60—**Koppel Cars**, 24-in. gauge, ¾, 1, 1¼ and 1½-yd
2—Morris centrifugal **Water Pumps**, with engine, 8-in. suc., 6-in. discharge.
1—**Van Wie Centrifugal** with Dake **Engine**, 8-in. suction, 6-in. discharge.
1—**Bush** centrifugal Belt, 8-in. suction, 6-in. discharge.
7—Horizontal stationary **Engines**, 8-10-15-25 and 35 H.P.
2—Stickney Horizontal **Gasoline Engines**, 10 H.P., new, 13 H.P.

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Narrow and Standard Gage for every service, rebuilt, immediate delivery.

Locomotive Cranes, Steam Shovels, Cars, Etc.

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RELAYER STEEL RAILS

Immediate delivery

30 tons 56-lb.
60 tons 60-lb
60 tons 65-lb.
40 tons 67-lb.

Located in Richmond, Va.

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Richmond, Va.

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Second Hand Equipment

MARSH'S GUARANTEED LIST

Buckets

1—2-yd. Hayward
4—1½-yd. clam-shells, various makes
1—1-yd. orange-peel bucket
1—1-yd. Page Dragline bucket
1—2-yd. Page Dragline bucket
1—¾-yd. Slack-line outfit complete

Cars

20—4-yd. Western, 36-in. gauge cars
20—1½-yd. Western 24-in. gauge cars
30—12-yd. Western standard-gauge cars
30—2½-yd. quarry cars, steel bodies
20—60,000 capacity gondolas

Compressors

1—Ingersoll-Rand Imperial type X-B-2, capacity 2400 ft., belt-driven
2—Bury Duplex, cap. 500 ft. each
1—Ingersoll-Rand Imperial Type 2 stage belted, 250 ft. per minute. New
1—14 x 12 Laidlaw-Dunn-Gordon belted
1—Sullivan 2-stage steam-driven, cap. 1800 ft. Lots of others.

Cranes

1—20-ton, 8-wheeled Browning, with 50-ft. boom and 1½-yd. Clam Shell, 6 months old.
1—10-ton American, single line, 4 wheel.
1—15 Ton Browning, 4-wheeled
1—O & S, 12-ft. gauge. All steel, good as new
2—McMyler 14-ft. gauge. All steel, fine

Crushers

1—No. 5 McCully
1—No. 6 Gates, style K, complete plant
1—No. 7½ Austin complete plant
1—No. 8 McCully
1—No 9 Gates K, good as new
1—No. 30 Kennedy
1—20 x 24 Traylor Saw Crusher
1—Shaft for No. 7½ Gates

Road Builders Outfit

10,000 ft. Koppel 24 in. ga. portable track
30 Koppel V-shape 24 in. ga. cars

Drag-Lines

1—Page drag-line, 50-ft. boom, 1-yd.
1—Class 24 Bucyrus
1—Slack-line outfit complete, 1-yd.

Hoisting Engines

2—7 x 10 D.C., D.D. Americans, with boiler
1—6½ x 10 D.C.D.D. Lidgerwood, with boiler
1—7 x 10 D.C., D.D. Flory, with boiler
1—9 x 10 D.C., 3-drum Lidgerwood, with boiler
1—10 x 12 single cylinder Lidgerwood Unloader Engine
1—8 x 12 D.C., D.D. Mundy D.C., D.D. with boiler
1—3½ Dake Swinger
1—5 x 8 American Swinger
1—6 x 9 O. & S. Builders Hoists

Locomotives

2—10 x 16—36-in. gauge dinkies
2—9 x 14—36-in. gauge, just overhauled
2—7 x 12—24-in. gauge,
1—150 ton Shay, geared, almost new
1—20 x 28 Mogul, good as new
2—60-ton, 10-wheelers, 170-lb. pressure
2—50-ton standard gauge Shay, geared, almost new

Steam Shovels

1—No. 1 Thew traction shovel, 1-yd.
1—No. 0 Thew shovel, first-class
1—18B Buycrus Traction
1—Model "41" Marion st. gg. trucks
1—Model "60" Marion 2½-yd. dipper
1—Model "61" Marion, extra high boom
1—70-ton Bucyrus, first-class
1—Model "50" Marion, almost new

Rollers

1—10-ton, 3-wheeled
1—10-ton Austin gasoline
1—8-ton tandem

Rail

3000 tons, from 30 to 60 lb.

Miscellaneous

1—Keystone Excavator, new last winter
1—10 x 6 x 10 Duplex steam
1—10 Morris Sand Pump
1—No. 2 Vulcan steam hammer
20—Steam drills, various sizes and makes
2—Steam Tugs
4—Dump scows
4—Tanks, various sizes
1—Holt 40-60 Caterpillar tractor
1—Huber Steam Tractor
1—Western Elevating Grader, good as new
1—Derrick car, 9 x 12, 3-drum engine, with claw shell, good condition

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MACHINERY WAREHOUSE & SALES COMPANY, *Successors to* **GEO. C. MARSH & CO.**

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LOCOMOTIVE CRANES

1—20-ton **new** Orton & Steinbrenner, 8-wheel, M.C.B. equipped, 50-ft. boom, bucket operating drums, 54-in. A.S.M.E. boiler.

1—20-ton 8-wheel M.C.B. Ohio, 35-ft. boom, 1½-yd, bucket.

1—15-ton **new** O. & S. 8-wheel M.C.B., 45-ft. boom, 1¼-yd. bucket.

1—10-ton American, 4-wheel, 38-ft. boom, bucket operating drums.

AIR COMPRESSOR

1—Ingersoll-Rand Imperial Type 10, capacity 1190 ft. free air per min. at 110 lb. pressure. Two-stage air, duplex steam.

BOILERS

4—200-H.P. Bonus, Kewanee (Heine type) water tube boilers, complete, all fittings, 150. lb pressure.

HOISTING ENGINES

2—No. 3½ Dake swinging gears, 7 H.P.

2—10 x 12 single friction drum, double cylinder, skeleton Brown Hoists. Drums 48 in. dia. Heavy duty.

1—8½ x 10 D.C.D.D. Lidgerwood, with boiler and four winch heads.

1—7 x 10 D.C.D.D. Lidgerwood skeleton.

1—6½ x 12 D.C.D.D. Mundy with boiler.

4—7 x 10 D.C.D.D. Lidgerwood with boiler.

2—16-H.P. Byers, D.C.D.D. Hoists, with boilers and swingers.

F. MAYER
1601 Monadnock Bldg., Chicago, Ill.

LOCOMOTIVE CRANES

Industrial, 10 ton, 4 wheel, single line.
McMyler-Interstate, 20 ton, 58-ft. boom, 8 wheel, M.C.B., equipped for bucket.

STEAM SHOVELS

Thew No. 1, 1-yd., standard gage, revolving.
Thew No. 0, ⅝-yd., on traction wheels.

Moore Bros
REBUILT MACHINERY

39 S. La Salle Street, Chicago, Ill.

LOCOMOTIVE CRANE

Industrial Works, 4-wheel, single drum
10 tons at 12 feet
5 tons at 20 feet
2 tons at 45 feet

Immediate delivery.
First-class condition.

CENTRAL CREOSOTING COMPANY
Conway Bldg., Chicago, Ill.

FOR SALE
1—50-ton Vilter
REFRIGERATING PLANT
1—Skeleton
STEEL BUILDING
75 x 150 ft. and about 40 ft. high to roof trusses
For full particulars and price apply to
M. J. HUNT
1316 Beach Street, Philadelphia, Pa.

FOR SALE
No. 0 Vulcan Improved, Steam Pile Driver
HAMMER
Address
NORTH-EASTERN CONSTRUCTION CO.
225 Fifth Avenue, N. Y. City.

SEARCHLIGHT SECTION

Second Hand Equipment

FOR SALE—IMMEDIATE DELIVERY

Owned By Us and Sold Under Absolute Guarantee.

STEAM SHOVELS

1—Marion Model 250 Revolving Steam Shovel, mounted on four 4-wheel trucks, 65-ft. boom with 3½-yd. dipper. Also equipped with 100-ft. dragline boom and 5-yd. Page dragline bucket.

5—70-C Bucyrus, shop numbers 1410, 1351, 1126, 1287, 1245.

3—Standard 70-ton Bucyrus, shop numbers 868, 733, 1482.

2—45-C Bucyrus, shop numbers 1297, 1202.

1—95-C Bucyrus, shop number 1304, 5-yd. dipper.

DRAG LINES

1—Model 220 Marion, all-steel dragline, shop No. 2839, mounted on four 4-wheel trucks, equipped with 60-ft. boom and 2-yd. Page bucket.

1—Class 14 Bucyrus, all-steel dragline, shop number 702, mounted on skids and rollers, 60-ft. boom and 2-yd. Page bucket.

DUMP CARS

50—12-yd. standard gage Western air dump.
15—12-yd. standard gage Oliver air dump.
100—3-yd. and 4-yd., 36-in. gage cars.
50—1½-yd., 24-in. gage.
13—Heavy duty, 4-yd. Western, 36-in. gage dump cars.

REVOLVING TRACTION SHOVELS

1—Class 14-B Bucyrus, ⅞-yd. dipper, shop number 1869.

1—Class 14-B Bucyrus, ⅝-yd. dipper, shop number 1663.

1—Class 18-B Bucyrus, ¾-yd. dipper, shop number 1554.

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2—Standard Western spreaders, almost new.
1—Standard, all-steel Jordan air spreader (for rent only).

LOCOMOTIVES

1—19 x 24 6-wheel switchers, Pittsburgh build, weight 50 tons.

1—16 x 24 Baldwin, 6-wheel switchers, weight 42 tons.

2—16 x 24 Davenport 6-wheel switchers, weight 42 tons.

2—16 x 22 4-wheel switcher, C. M. & St. P., J-2 class, weight 32 tons.

5—36-in. gage, 10 x 16 and 9 x 14 Vulcan and Davenport saddle tank locomotives.

2—7 x 12-in., 24-in. gage Davenport, shop number in the twelve hundred.

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72 pcs. Jones & Laughlin, 18 ft. long by 12 in. wide.

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Northwestern Branch: 1308 Pioneer Building, St. Paul, Minn.

FOR SALE

Industrial Works

LOCOMOTIVE CRANE

Capacity 20 tons at 12 ft., 8-wheel car (not M. C. B. but Bogie truck) 50 ft. and 36 ft. boom, new double drum, Ohio boiler, cab, magnet control equipment. Overhauled this summer. Working every day. Inspection Ohio. Available Dec. 15.

Wire for appointment.

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WE BUY

STEEL WIRE ROPE

Plow or crucible, half to one inch, new or second-hand. Market price for kind, condition and length.

CLARK & COMPANY (Incorporated 1895)
225 Fifth Avenue, New York, N. Y.

STEAM SHOVELS

1—"85-C" **Bucyrus,** late number, fine condition, 4-yd. dipper.

1—"76" Marion, **special,** 3-yd. long boom, stripping shovel.

1—"70-C" Bucyrus, 2½ yd.

1—"65-C" Bucyrus, 1½-yd. Sewer Shovel.

1—"261" Marion, 3-yd. drag line, 115-ft. boom, traction.

1—No. "0" Thew, ⅝-yd. traction.

2—"28" Marions, ¾-yd. traction.

1—"14-B" Bucyrus, ⅝-yd. traction.

The above are ready to ship and operate. We are prepared to furnish detailed inspection report on these machines by any Technical Inspection Company you designate.

Correspondence solicited.

CHESTER A. PHILLIPS & COMPANY
Old Colony Bldg., Chicago, Ill.

FOR SALE

CRANE

with five-ton chain fall, made by J. C. Speidel, Reading, Pa., made up of two 15-in. I beams, 24-in. on centers, 12-in. wheels at each end; and rails to carry wheels are approximately 24 ft. 8 in. on centers. Can be inspected.

3901—Eng. News-Record.

Quarry Equipment

No. 8-K Crusher
No. 4 Crusher
3—150 H.P. Boilers
300 H.P. Buckeye Automatic Engine
7 x 10 D.C., D.D. Lidgerwood Hoist and Boiler
Porter 36-in. Dinkey
40—All Steel, 2-yd. Quarry Cars
300 ft. 8-in. Wrought Pipe
Two million gal. Compound Steam Pump
Two 3-yd. Friction Hoists
80-ft. Belt and Bucket Elevator
Three 48-in. Revolving Screens

Many other items. Send for complete list and prices. Immediate delivery.

LEHIGH STONE COMPANY
Kankakee, Ill.

Oh Them Happy School Days!

Remember the old copy books wherein we learned how to write so other folks could read what we wrote?

The beautiful Spencerian script at the top—pen over your left shoulder—and all that kind o' thing?

Then we wrote it over and over all the way down the pages, each line getting worser and worser as we went down.

Oh, them happy days! Can you beat 'em?

We not only learned how to write, but we got a lot of wisdom we have never forgotten.

Here is one of those copy book captions that has saved us thousands of dollars:

"WHATEVER IS WORTH DOING AT ALL IS WORTH DOING WELL."

How do you do when it comes to the matter of purchasing elevator equipment?

Are you one of the fellows whose copy book caption was:

Cheap John. As Cheap As We Can. Cheap. Cheap. Cheap.

Buy cheap stock, cheap oil, cheap help, cheap tools, if you are a Cheap John, **BUT NEVER BUY A LOW PRICE ELEVATOR IF YOU WANT A CHEAP ELEVATOR.**

If you want to get into the right kind of company, follow the example of fellows like these:

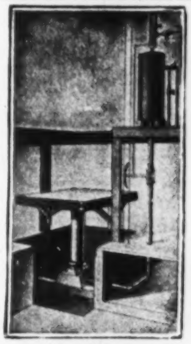
United Gas Improvement Co.
Yale & Towne Mfg. Co.
Cluett Peabody & Co.
Consolidated Gas Co.
National Cash Register Co.
Hammermill Paper Co.
Proctor & Gamble Co.
H. J. Heinz Co. "57"
International Harvester Co.
John Wanamaker
Remington Typewriter Co.
Continental Gin Co.
Erie Railroad Co.
Crane & Co. (Dalton)
United States Government
E. I. Du Pont & Co.
General Electric Co.
Packard Motor Car Co.
Continental Can Co.
American Tobacco Co.
John Morrell & Co.

All of whom, and over 2000 more, will tell you, if you want to save money, be sure and

"Hook 'er to the Biler"

CRAIGE RIDGWAY & SON CO., Coatesville, Pa.

ELEVATOR MAKERS TO FOLKS WHO KNOW



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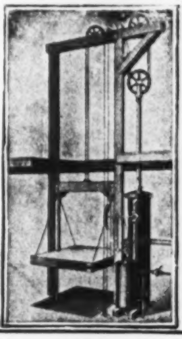

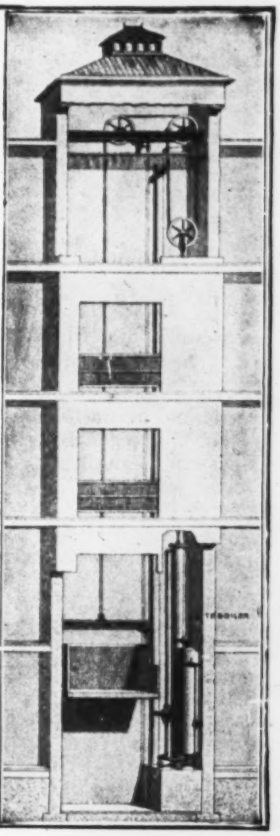

If there is anything you want—

or something you don't want—that *other* readers of this paper can supply—or use—advertise it in the

Searchlight Section

NOW is the time to offer good second-hand machinery for sale. Demand exceeds production for immediate delivery of some equipment; that's why the market on used equipment is so good.

NOW—or any other time, use the Searchlight Section for advertising

Agencies Wanted
Agents Wanted
Auction Notices
Buildings For Sale
Business Opportunities
Civil Service Opportunities
Contracts To Be Let
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Desk Room For Rent
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Machinery For Sale
Machinery Wanted
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Exchanges
Factory Buildings For Sale
For Rent Items
Franchises
Industrial Sites
Machine Shops
Miscellaneous Wants
New Industries Wanted
Partners Wanted
Patents For Sale
Patent Attorneys
Plants For Sale
Positions Vacant
Positions Wanted
Properties For Sale
Receivers' Sales
Representatives Wanted
Salesmen Available
Salesmen Wanted
Subcontracts Wanted
Work Wanted
Etc., Etc., Etc.

America Divided

In this time of unprecedented national peril and world peril, do you want America to be one nation, strong with the strength of unity? Or do you want America split with perhaps half a dozen sections, weak with the ills and evils of sectionalism?

THIS LAST IS NO DANGER BORN OF hysterical dream. America has been committed by act of Congress to a course leading toward such a disastrous result, and this split in national life will begin July 1, 1918—unless the present law be altered.

Here is the situation:

MODERN NATIONS ARE BOUND TOGETHER not so much by the machinery of government as by Ideas. Fundamental ideas held in common by all, fully exchanged so that distantly placed people may understand and sympathize with each other—these are what bring a nation together and what hold it together.

THE GREATEST INSTRUMENT AND medium for the constant dissemination of these big nation-binding ideas is the press—particularly the weekly and monthly periodicals. These periodicals have not local or sectional bias; they go to all parts of America, and serve all parts alike; their great service is in helping bring all parts close together into one through a common understanding.

THESE NATION-BINDING PERIODICALS are confronted with certain injury and destruction—which means loss to you personally, and loss to your country. Postal legislation was introduced in the present Revenue Bill, and is now law, which divides the country up into "zones" and increases the average carrying charge upon magazines and periodicals about 300 per cent—as much as 900 per cent for the more remote sections of the country. This increase varies from 50 to 900 per cent.

THIS TREMENDOUS INCREASE IN RATES is not necessary for the business solvency of the Post Office Department. Last year the Post Office Department earned a surplus of nearly $10,000,000.

THIS MEASURE IS A TAX-GATHERING contrivance. *It is a tax upon ideas*—upon that spreading of ideas which hold us together and inspires us as a nation. The Post Office was never designed as a tax-gathering contrivance; it was basically designed to give service to the people—*to all the people at the same rate.* The Post Office should not be perverted from its noble purpose.

AND ANY SUCH METHOD OF TAXATION is not necessary in order to tax the publishers' profits. The publishers are not trying to evade taxation. They will gladly accept any rate of tax upon their profits that may be levied. Most of them have gone on record as being willing to turn over to the Government their *entire net profits* for the period of the war.

This measure, through its "zone" system, will have the following disastrous consequences:

1. It will destroy a large part of the periodicals of the country. You will lose the magazines that have kept you informed on your country's problems, that have helped you in your work. Your children will lose the clean publications that have entertained and help educate them. And eventually such magazines as do survive will have to pass their unnecessary increase in cost on to you in case you live at a distance from any publishing center. It amounts to this: *You are fined because your occupation or your preference prevents your living in New York.*

2. Infinitely more serious, this "zone" system will result in dividing the country into sections, each developing its sectional ideas. The nation will be split into an East, a Middle West, a Pacific Coast, a South, a Southwest. And this split will be made in the world's greatest crisis, when we should be striving for union rather than disunion—when North should be bound to South and East bound to West by the constant flow of ideas—*National Ideas.*

This is the time of all times when America must be a *united* America—*one nation* strong with the strength of unity.

***Let your* influence be used to that end.**

Write your Congressman and demand the repeal of the iniquitous postal amendment

THE AUTHORS' LEAGUE *of* AMERICA, INC.
REX BEACH, President

Executive Committee

GERTRUDE ATHERTON
ALICE DUER MILLER
ULIAN STREET

GELET BURGESS
HARVEY O'HIGGINS
LOUIS JOSEPH VANCE
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CHANNING POLLOCK
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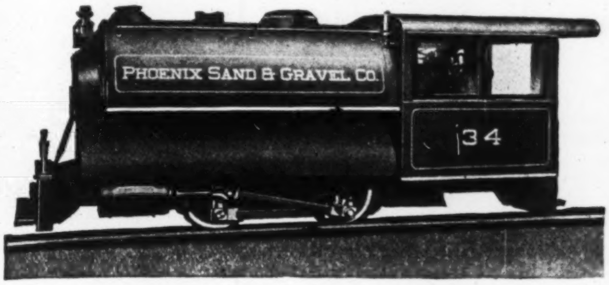


LOWER UPKEEP MEANS LARGER PROFITS

Profits increase in proportion to the reduction in cost of upkeep and repairs to equipment and machinery.

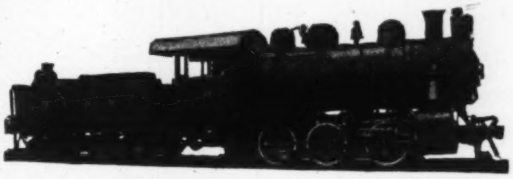
Locomotives built to require the least attention add to your profits because work progresses when the locomotives are in service. Idle locomotives delay work and disarrange your whole schedule. That's why an idle locomotive is costly.

Our locomotives for contractors are designed and built for long life and continuous service. Parts liable to wear are kept in stock for immediate shipment. These parts are made to templates and gauges, insuring a perfect fit without extra machining. By this method long delays waiting for duplicate parts are avoided.

Get in touch with us when you need a locomotive.

AMERICAN LOCOMOTIVE COMPANY
30 CHURCH STREET, NEW YORK
McCormick Building, Chicago, Ill. A. Baldwin & Co., New Orleans, La.
Dominion Express Building, Montreal, Canada
N. B. Livermore & Co., Merchants National Bank Building, San Francisco, Cal.
Northwestern Equipment Co., Northwestern Bank Building, Portland, Oregon.

Why pay double for Coal?
With the price of coal sky-rocketing and the outlook that soon none will be had at any price, you had better give serious thought to the fuel situation. **Bell Locomotives burn kerosene.**
Write for details.
BELL LOCOMOTIVE WORKS, Inc.
30 Church Street, New York City



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Contractors' Dinkeys
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Haulage Equipment

SQUARE BOX
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Air and Hand Dump Cars, Dinkies, Portable Track, Switches, Rails, Etc.

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Prompt Shipments
Write for catalogs and Sale or Rental terms.
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Bottom Dump Semi-Trailer

This **Watson** Bottom Dump Semi-Trailer is ideal for speedy hauling. No fussy device to get out of order. Load is dropped exactly where and when desired. Three sizes—120 cu.ft., 100 cu.ft., 81 cu.ft. Axle has Timken Roller Bearings. Instantly converted into trailer by addition of lower front gear and wheels.

Send today for full data on Watson "Tractortrucks," Trailers and Semi-Trailers.

Watson Wagon Company
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Western Outfits

assure the grading contractor of profitable progress under all conditions.

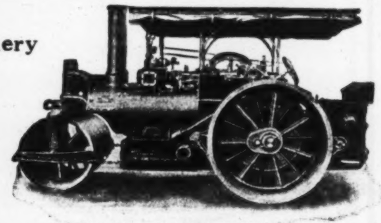
Their substantial construction and long lasting qualities cut down the overhead cost.

WESTERN Wheeled Scraper Co.
Aurora, Ill.

Let us send you our catalogs.

Quality Machinery

Buffalo Pitts Rollers



are purchased by discriminating buyers because of the many years of satisfactory service which they will render, the low repair costs and their general reliability. *All sizes—all types—write for catalogue.*

Built Only by
THE BUFFALO-SPRINGFIELD ROLLER COMPANY
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For docks, bridges, piers, foundations and paving blocks, granite is the ideal material. Quarried in monoliths of any size. Tidewater shipping facilities.

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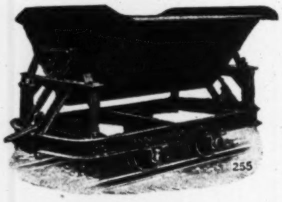

Every Industrial Railway requirement, whether it be for Standard or Special Equipment, can be satisfactorily and economically met by the Easton Industrial Railway Service.

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For forty years some of our first Vulcans have been steadily showing their haulage power over rough or hastily-laid tracks and around sharp curves.

Are you in need of a locomotive of this type?

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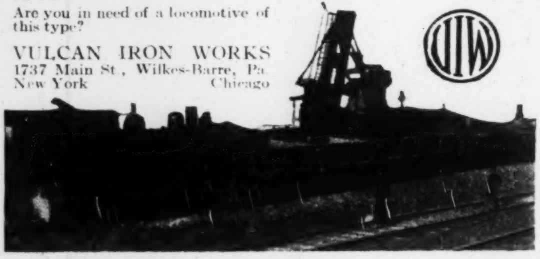

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Load your wagon with
Rapid Loaders
and keep the teams moving.
Circular has all details—
write for it now.
The Bonney Supply Co., Inc.
114 Livingston Bldg., Rochester, N. Y.

Municipal Bonds : :

Dealers in these securities look to NEWS-RECORD Proposal pages for information regarding new issues.

61

Dart MOTOR TRUCKS

Haulage is a most important branch of contracting. Progress of the various units of the contracting organization is often times entirely dependent on regularity of operation. Dart Dependability and practical immunity from breakdowns, is a valuable asset in contracting service.

We would be glad to furnish you with data.

Let us refer you to our nearest agent or write direct to us.

DART MOTOR TRUCK CO. WATERLOO, IOWA

AUSTIN ROLLERS
IN USE ROLLING AND LEVELING
CAMP KEARNY GOV'T. CANTONMENT

CANTONMENT CONTRACTING

Perhaps no more responsible work has devolved on contractors than the expeditious building of the training camps for our National Army. Contractors and others concerned had to see that the equipment used was RIGHT.

The above photo taken at Camp Kearney, Cal., speaks volumes for Austin Western Road Equipment which has been used so largely at a great majority of the Cantonments, both by Contractors and the U. S. Government.

AT CAMP KEARNEY

Nine Austin Motor Rollers Were Used

the photo showing 7 three-wheeled rollers and 2 tandems. Contractors should get their names on the list for the new Austin-Western General Catalog soon to be issued.

Apply to the **Austin-Western Road Machinery Company, Chicago**

STANDARD

Refined
Mexican Asphalt
(SOCONY BRAND)

Prepared in various grades for

Sheet Asphalt Pavements and Bituminous Macadam Road Construction

by either the penetration or mixing method

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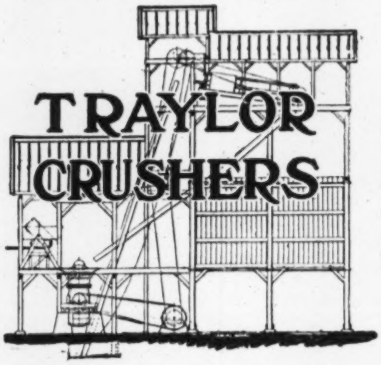
COMPLETE CRUSHING PLANTS



Our engineers have designed some of the largest crushing plants in the world.

Call upon us for plans or specifications to meet your conditions. We will send one of our engineers to co-operate with you in the design and laying out of your plant.

Tell us your requirements.

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Erie Tandem Rollers

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Their characteristic features are

Strength, Durability, Simplicity of Operation, Economical Maintenance, Upkeep and Long Life.

All Sizes in Stock

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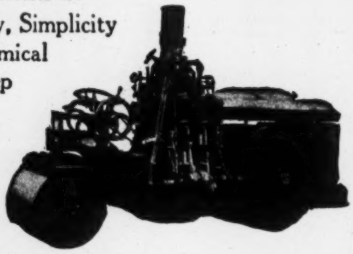

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Air-Separation

for grinding all materials to a powder.

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Vinal Haven Improved Granite Block Pavement

It is Adaptable to the Needs of Auto and Truck alike

REASON No. 5 The close grain qualities of Vinal Haven Improved Granite Block Pavement make it smooth, easy riding for the daintiest coupe—and its rugged make-up of Granite enables it to stand the strain of heaviest trucking through the years. Write for the full list of its advantages.

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CRUSHING WORLD KNOWN
ROLLS-CRUSHERS
EARLE C. BACON, ENGINEER
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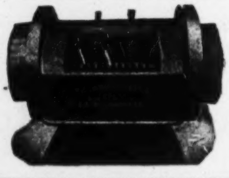

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INSIST ON SEEING THE NAME **BOGALUSA** ON THE SO. PINE YOU BUY

and you will enjoy an AUTOMATIC GUARANTY of EXTRA DENSE timber, Masterful Manufacture, Scrupulous Count ("every foot a foot") and Grading—at the mill—to meet the very exacting specifications of the FACTORY MUTUALS, the AMERICAN SOCIETY FOR TESTING MATERIALS, the AMERICAN RAILWAY ENGINEERING ASSOCIATION and the SOUTHERN PINE ASSOCIATION.

ORDER IT BY THE NAME "BOGALUSA" **TRADE-MARKED** ON TIMBERS, PLANKS, BOARDS AND BUNDLES

of the internationally-famous product of the largest saw-mill in the world (1,000,000 feet a day). Let this be your "Safety First" in Lumber Buying.

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20,000,000 feet
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**Complete Sales, Grading and
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See our full page advertisement in following issue.
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CENTURY WOOD BLOCKS
THE FLOORING WITHOUT A FAULT

PROMPT shipment of creosoted wood blocks, ties, timbers and lumber.

**The Ohio Wood Preserving Co.
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**ASPHALTIC
CONCRETE
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Elastite
**EXPANSION
JOINT**
The original and only Elastite Joint

Comes to the job ready for use. No joints to pour. No spacing strips to remove.
Used in National and Dixie Highways.
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PAVING BLOCKS
NEVER BUCKLE OR DECAY
We have been in the creosoting business 30 years and not a single piece of wood treated by us has ever decayed. **We manufacture Creosoted:**—Conduit, for underground wires, Poles, Ties, Cross Arms, Anchor Blocks, Posts, Piles, Plank, Lumber, Wharf and Bridge Timbers, etc. Also Wood Pipe and Steam Pipe Casings. Send for Catalogue C.

Wyckoff Pipe & Creosoting Co., Inc.
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WE **CREOSOTE** railroad ties, piles, poles and wood paving blocks in any quantity at our **NEWARK, N. J.**, plant. We can make deliveries at the buyer's convenience, as we keep a large stock of untreated material on hand. Our prices will satisfy you. American Creosoting Company, 17 Battery Place, New York.

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Avenarius
CARBOLINEUM

**PRESERVES
WOOD
EVERYWHERE**

Simple methods—known costs—explained in new special circular—get it. Avenarius Carbolineum prevents decay of wood. Doubles life of timber. Costs 1/2 to 2c. per sq. ft.—$5 to $12 per 1,000 ft. B. M. Applied by brush, spray or open tank. 40 years' continuous service. Depots everywhere.

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American Creosote Works,
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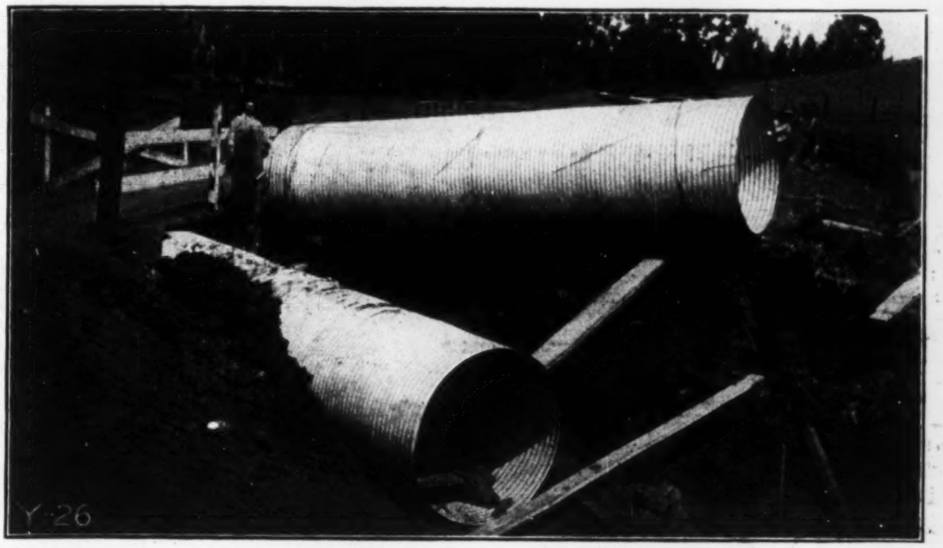
**Creosoted cross arms, Lumber, Paving Blocks, Piles, Poles and Ties.
Private free wharf for ocean vessels at New Orleans.
Capacity 100 million feet board measure annually.**
Plants at New Orleans, La. and Louisville, Miss.

While the Boys Are Gone to War

Labor is going to be higher-priced and harder to get than ever before



Have You Ever Realized That

"Armco" Iron Corrugated Culverts

are transported and installed with but a small fraction of the labor necessary for other types of construction? Skilled workers and heavy tackle are not necessary—just common sense and a minimum of elbow grease. Where "Armco" Iron Culverts are employed the ditch is often opened and closed and traffic resumed on the same day.

For all that, they are Built to Last. Their material is the *purest* and most *durable* of irons, and their construction is the recognized standard.

Write or phone the Nearest Manufacturer for full information on Rust-Resisting "Armco" Iron Culverts, Flumes, Gates, Sheets, Roofing and Formed Products.

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California, West Berkeley	California Cor. Culvert Co.
Colorado, Denver	R. Hardesty Mfg. Co.
Delaware, Clayton	Delaware Metal Culvert Co.
Florida, Jacksonville	Dixie Culvert & Metal Co.
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Iowa, Des Moines	Iowa Pure Iron Culvert Co.
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Montana, Missoula	Montana Culvert Co.
Nebraska, Wahoo	Nebraska Culvert & Mfg. Co.
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New Jersey, Flemington	Pennsylvania Metal Cul. Co.
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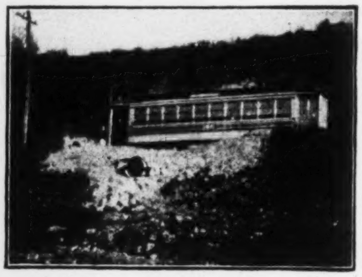
Resists Rust

Canada: Canada Ingot Iron Co., Ltd., Guelph, Sherbrooke, Winnipeg, Calgary

Resists Rust



Every Little Valley Needs

some sort of provision for drainage. From the standpoints of time, labor, economy, convenience and permanence the best solution for the problem is

"ACME" (NESTABLE)

Corrugated Anti-Corrosive NO-CO-RO METAL **Galvanized Culverts**

Furnished either Set-up or knocked-down as desired. The transportation of these Culverts, in nested form, is easy and the placing can be handled very quickly by average laborers.

The job is permanent, too, for NO-CO-RO METAL is 99.90% pure iron and resists rust.

Write Dept. M-3 for full information.

THE CANTON CULVERT & SILO CO.
MANUFACTURERS
CANTON, OHIO, U.S.A.

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Do Successful Contractors Use

FELTON'S IMPROVED COUPLINGS

for Conduit and Sewer Rods?

PAT JUNE 2 1903

A big contractor says:

These Couplings represent the latest and most improved device for connecting sewer and conduit rods. No other coupling possesses so many strong features of merit.

Send for circular and prices.

HAROLD L. BOND CO., 383 H Atlantic Ave. Boston
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Contractor's Tools, Supplies and Equipment

Permanent Water-Tight Sewer Pipe Joints—

AT LITTLE COST

Not only do these ompounds give permanent watertight joints but joints flexible enough for the pipe to be jarred out of line without leakage.

JOINTITE and FILTITE

Write nearest office for Catalog 12 with helpful hints on sewer pipe joints.

PACIFIC FLUSH-TANK CO.

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Security Sewer Rods

Security Rods are made from second-growth hickory, with malleable iron couplings swedged or shrunk down very tightly on to the curved places at end of sticks. Security couplings *cannot* come off.

Joint and unjoint easily and quickly—light weight—long runs easily made. No slack but lend themselves to all practical bends.

They cannot buckle or uncouple in the duct.
Send for Flyer No. 18.
3-Foot Rods, $.65 each
4-Foot Rods, $.75 each

F. Bissell Company
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Garbage Reduction Machinery
Cobwell Process

No odors. Absolutely sanitary. Now used in Los Angeles and being installed in New York City.

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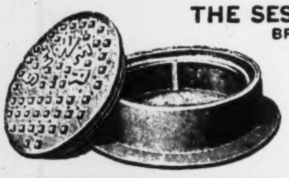

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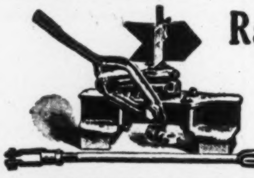
SEWER and SUBWAY MANHOLE CASTINGS

Sewer Catch-Basin Castings, Etc.

— TO ORDER —



Ramapo Iron Works
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Switch Stands, Plantation Cars, Switches, Frogs, Etc.

Black and Galvanized Sheets

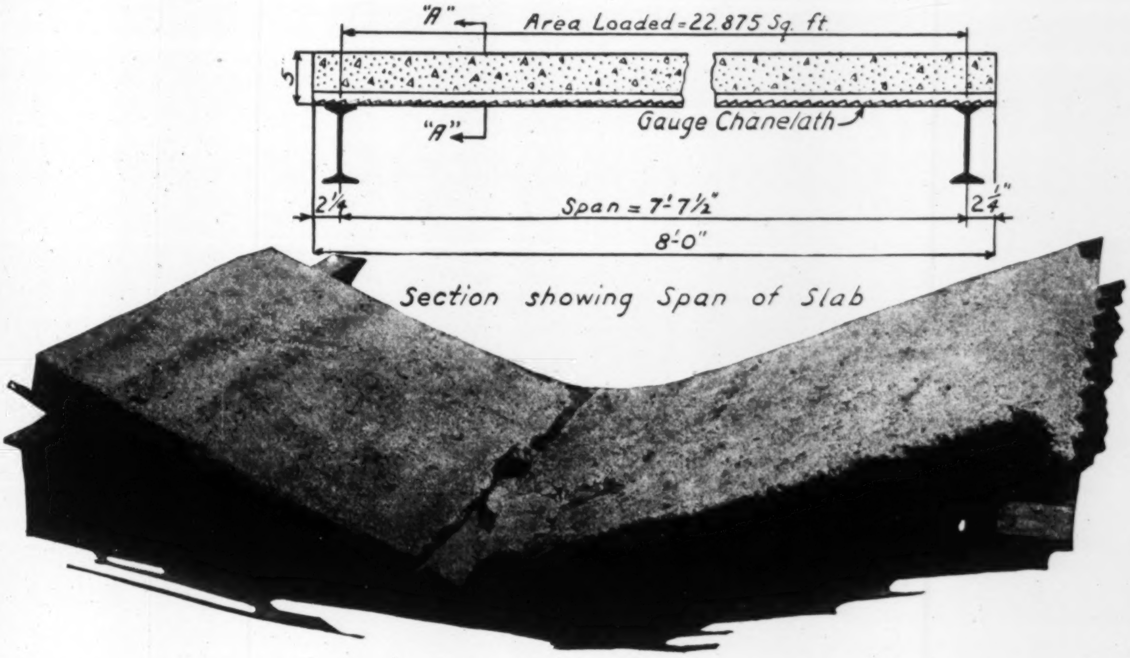
APOLLO-KEYSTONE Copper Steel Galvanized Sheets

Demand this material exclusively FOR CULVERTS, FLUMES, TANKS, ROOFING, SIDING, and all forms of exposed sheet metal work—highest in quality, durability and rust-resistance. We also manufacture APOLLO Corrugated and Formed Roofing Products, Black Sheets of every description, Electrical Sheets, Special Sheets, Bright Tin Plates, Keystone Copper Steel Roofing Tin, Etc.

AMERICAN SHEET AND TIN PLATE COMPANY, —— **General Offices: Frick Building, Pittsburgh, Pa.**

AMERICAN SHEET & TIN PLATE CO. APOLLO BEST BLOOM TRADE MARK REGISTERED PITTSBURGH KEYSTONE COPPER STEEL

Reinforcing value of "T-Rib" "CHANELATH" equals high carbon steel rods



THIS is one of three concrete slabs reinforced with "Chanelath" and tested by the Philadelphia Bureau of Building Inspection. The slab was broken by loading uniformly with billets of pig iron.

The method of failure proves that "Chanelath" develops a bond with the concrete that is sufficient to develop the full strength of the steel.

The exceedingly high unit stresses in the steel at the time of rupture—the minimum being almost 50% more than the usual ultimate strength of medium steel reinforcing rods—proving "Chanelath" to be the equal, in reinforcing value, to the best quality of high carbon steel rods.

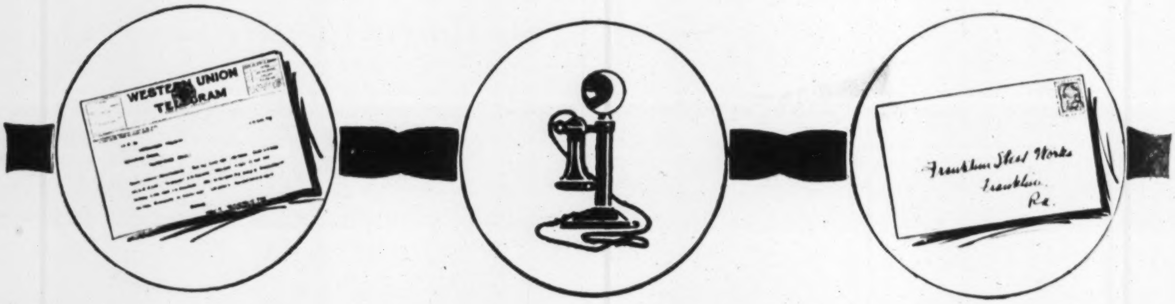
"Chanelath" is a one-piece form and reinforcement for concrete floors and roofs.

Let us send you a copy of the "Chanelath Handbook" and a complete report of the Philadelphia Tests.

North Western Expanded Metal Co.

Members of the Associated Metal Lath Manufacturers

900 Old Colony Building **Chicago, Ill.**



No Matter How You Order "Franklin" Steel for Concrete Reinforcing

You get it as promptly as you need it. Service is one of the chief things that has made the quality of Franklin Steel popular. Prices are right, too. Ask for quotations.

Bulletin explaining just WHY Franklin Steel is extra strong will be mailed you on request.

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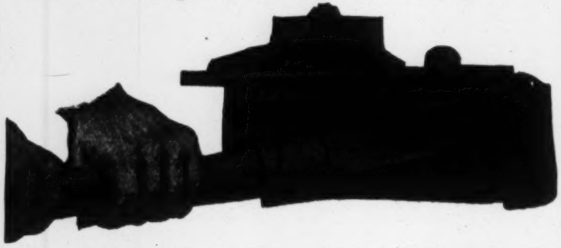

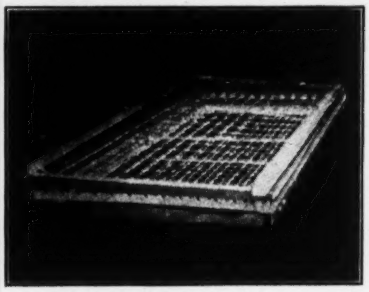

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have nothing on them to become lost, either when in use or in transit. They are strongly built in but two parts, with National Fabric Springs and with the best steel throughout.

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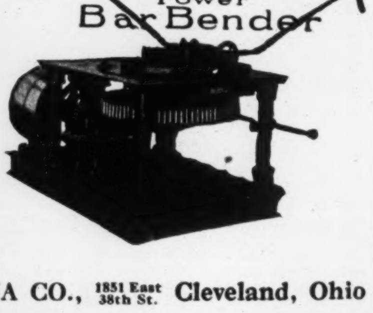

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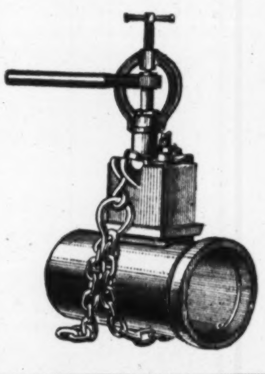

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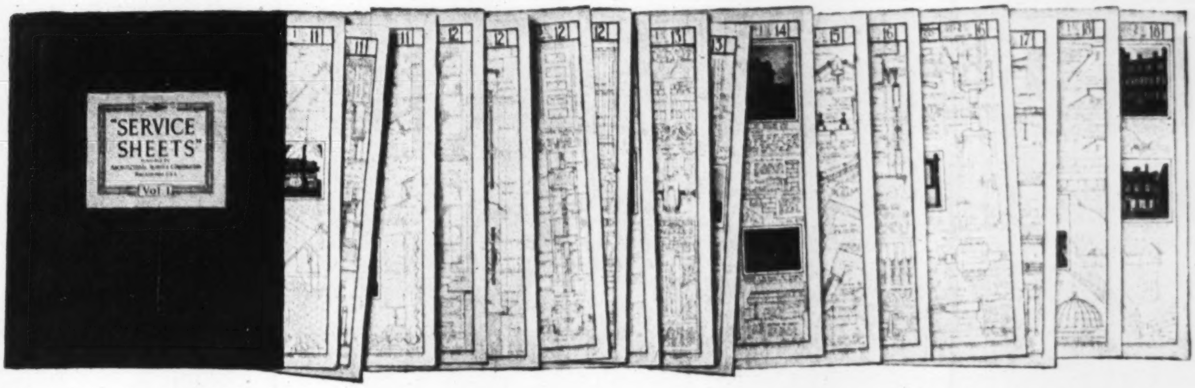

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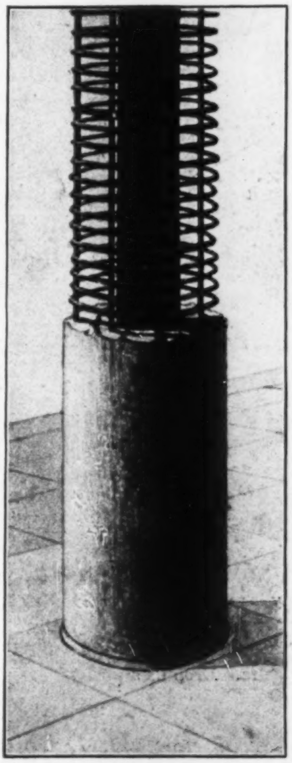

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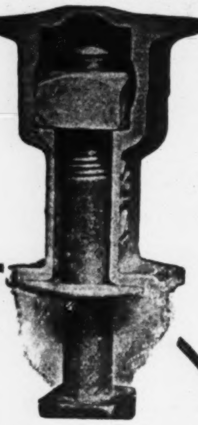

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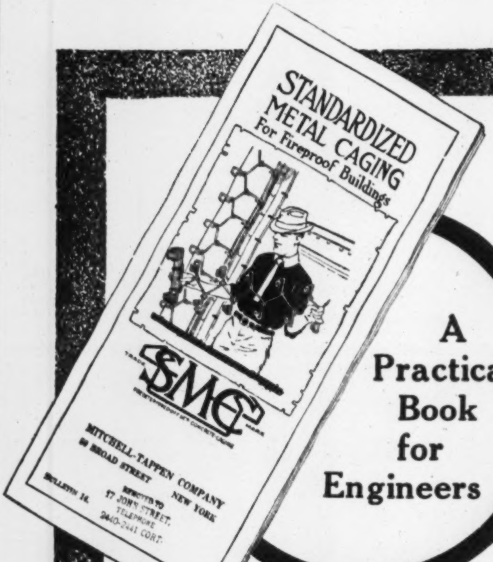

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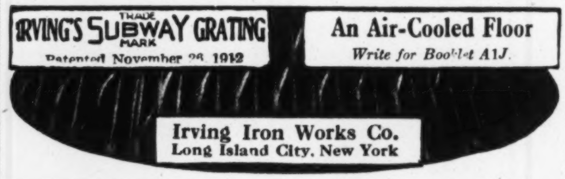

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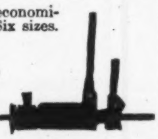

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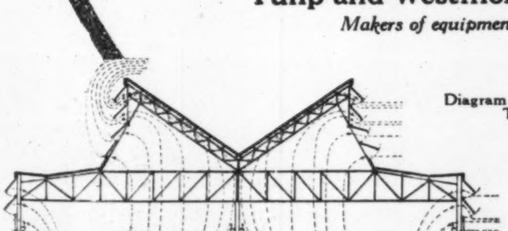

Diagram showing ventilation of typical Pond Truss building in a cross wind.

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ANTI-HYDRO hardens and waterproofs concrete integrally and does it while the concrete is being laid. No treatment is required after work is finished—no extra labor—no delay.

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It hydrates cement at 20 degrees F. It so reduces the labor of finishing concrete floors, walls, etc., that it pays for itself on every job.

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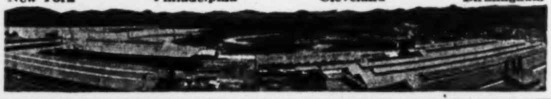

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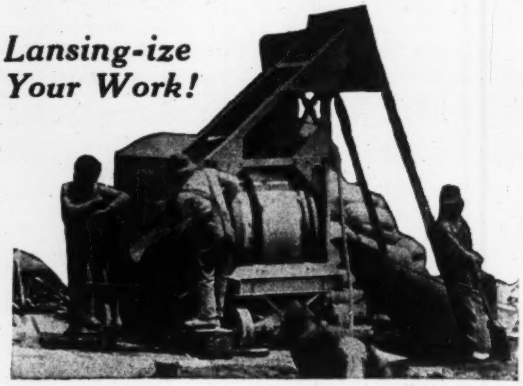

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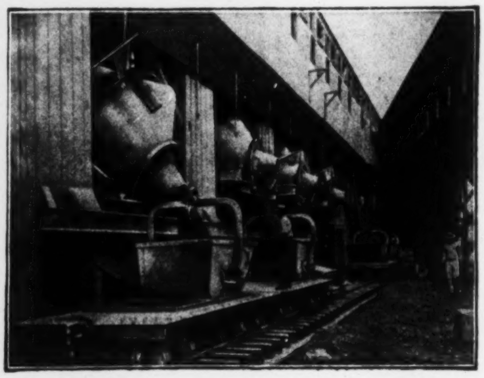

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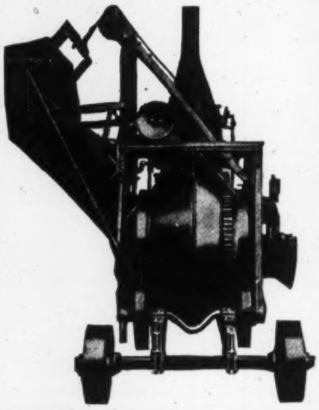

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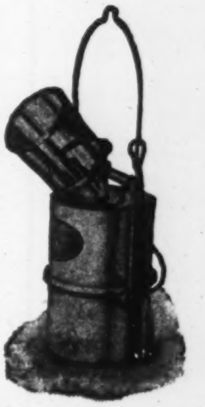

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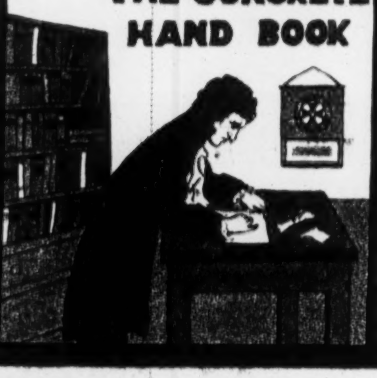

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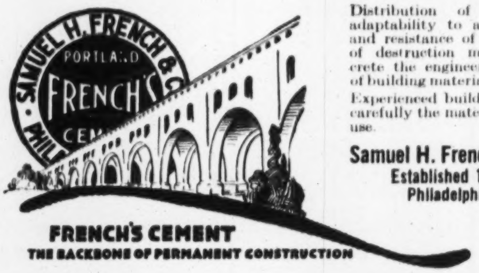

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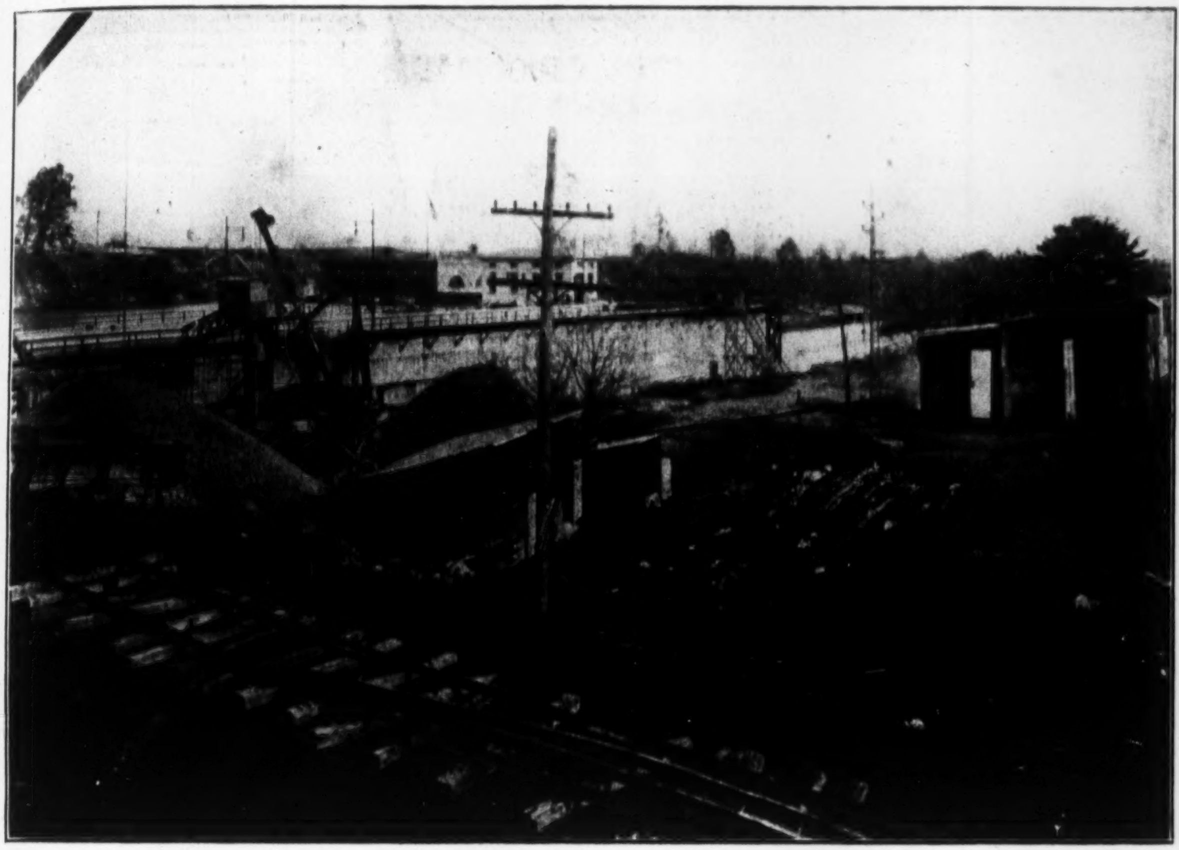

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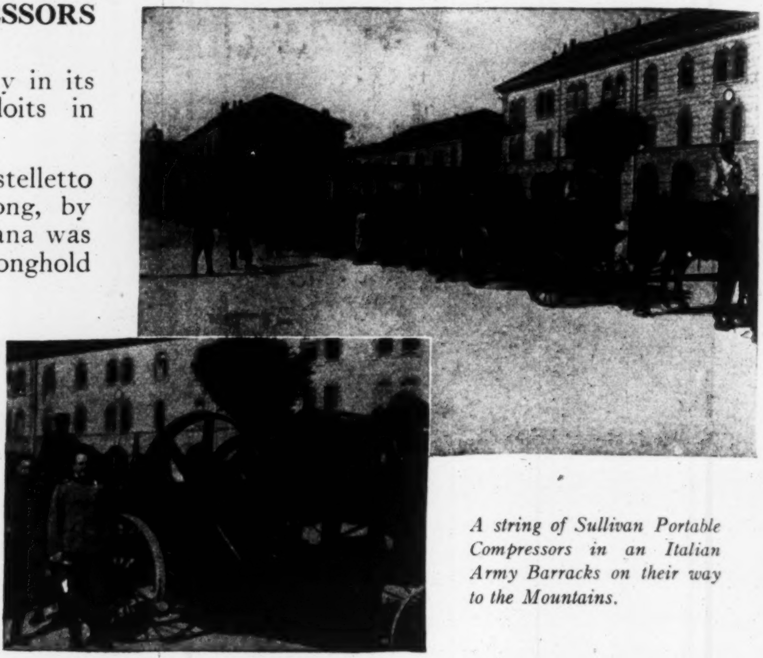

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Bulletin 4221 describes the Jackhamer

Bulletin 3015 describes I-R Portable Compressors

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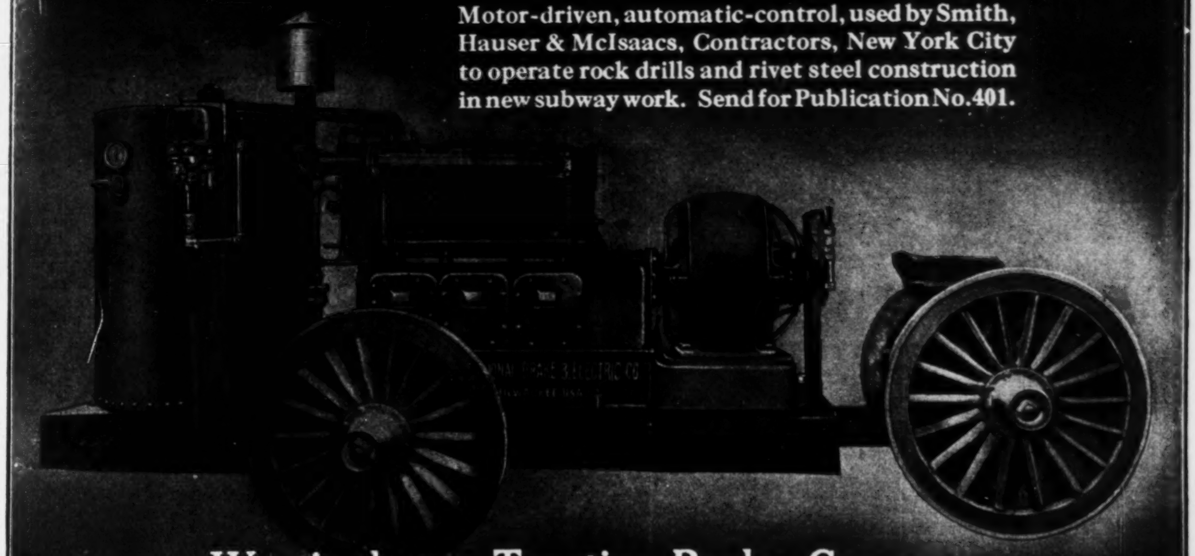

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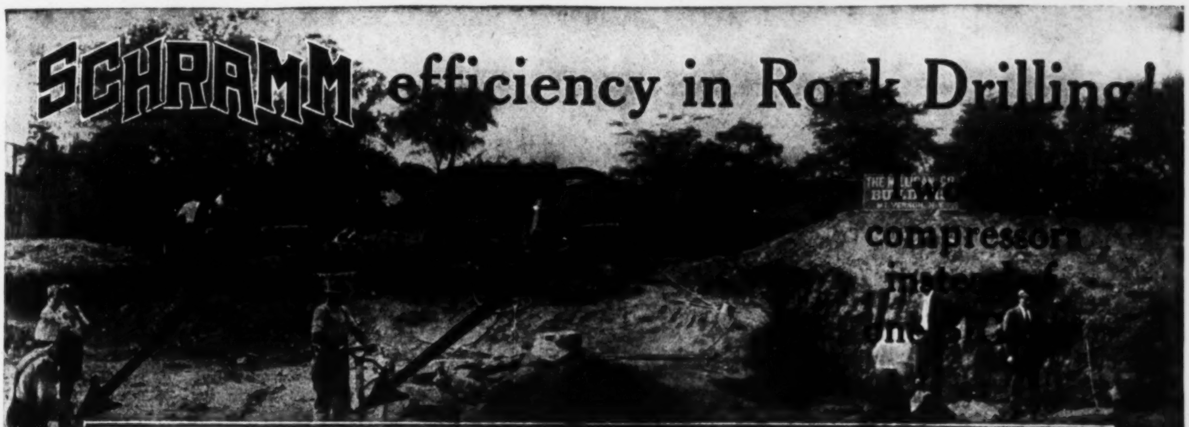
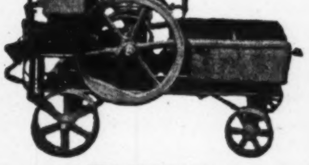


FOR ALL WATER WORKS EXCAVATIONS

Whether you are building a new reservoir or filter plant, laying water mains, riveting stand pipes or require a dependable field supply of compressed air for any purpose, you can save money by using

The SCHRAMM Portable Air Compressor



IT'S PORTABLE

1.—Absolutely dependable.
2.—Very economical in gasoline.
3.—Direct connected. No power lost through belting or gears.
4.—Readily portable from place to place.
5.—Very rigid and carefully aligned with low center of gravity. Extremely durable.
6.—Available for straight power purposes when not used for air.
7.—A liberal free trial allowed to prove every claim.

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New York Show Room: 140 West Street
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THE WAUGH
"DREADNAUGHT"

The superiority of this drill is being continually demonstrated. Its rapid drilling power and ability to stand up under the heaviest service have established for it an unequaled reputation for efficiency.

Shenandoah, Pa., Nov. 27, 1917

Denver Rock Drill Mfg. Co.,
30 Church Street,
New York, N. Y.

Gentlemen:

I have had two of your Dreadnaughts since May, and during the past few months I have done the following work: 260 feet 10 x 7 tunnel, conglomerate rock, very hard. It took me 44 days at 6 hours per day. I have put in 4—10 ft. holes and 14—9 ft. holes each day. Also, I drove 400 feet 10 x 7 tunnel, slate and sandstone. It only took 57 days, and we only worked 3 hours per day. I have put in 4—10 ft. holes and 14—8 ft. holes each day. I am giving this information because I am well pleased with your drill, and it only cost me about $20.00 in repairs, some water tubes, a few arm bolts, and one chuck driver, and in a short time I will be the owner of a few more of your Dreadnaughts. I have done this work at Potts Colliery for the Philadelphia and Reading Coal and Iron Co.

Yours very truly,
Jenett Sylvester,
Rock Contractor.

THE Denver Rock Drill Mfg. Co.

DENVER, COLO.

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Canadian Rock Drill Company, Ltd., Selling Agents
Toronto Cobalt, Ont. Nelson, B. C. Vancouver

F-26

There's nothing better for chipping out old masonry than a
"BUSY BEE"

There's many a situation where you want to take out piers or concrete foundations or other masonry inside or near buildings. You can't blast—and hand-work is too slow and expensive. Here's where McKiernan-Terry "BUSY BEES" step in and save you days and dollars.

You'll find that most of the biggest contractors handling foundation work use them.

Send for BULLETIN.

McKiernan-Terry Drill Co.
235 Broadway
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Rock Drills, Core Drills, Hammer Drills, Atlas Jacks, Pile Hammers

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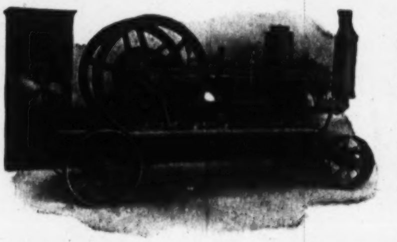
PORTABLE AIR COMPRESSOR



The tank mounted **Chicago Pneumatic Gasoline Engine Driven Compressor** brings the air to the job, at very low cost. Is direct connected, automatically regulated, self-contained and has independent cooling system. Can also be furnished to operate on Gas or Fuel Oil, and can be furnished skid mounted if desired for semi-portable work.

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1036 Fisher Bldg., Chicago Branches Everywhere **52 Vanderbilt Ave., New York** A-4

THE NORWALK IRON WORKS CO.
South Norwalk, Conn.
MAKERS OF
AIR AND GAS COMPRESSORS
of any volume and any pressure

RELIANCE EQUIPMENT

Complete Crushing Plants
Road Oilers
Road Scarifiers
Street Sweepers

Universal Road Machy. Co.
KINGSTON, N. Y.
Branch Offices: Boston—Harrisburg

This is Real Hose

That is what is said by men who have the handling of American Metal Hose on all kinds of jobs. When the construction is finished they know that they owe much to

American Metal Hose

because it has saved the delays, damage and possible injuries which there might have been had they used just ordinary hose.

Steam won't burn it, oil won't rot it. It is so flexible that it will meet all requirements. It is so built to stand the wear and tear of the hardest construction jobs, and is daily doing so successfully

THE AMERICAN METAL HOSE CO.
Waterbury, Connecticut

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Steel for Service

The success of a contractor in connection with a specific job, or a great number of jobs covering perhaps his whole contracting career has depended largely upon his judgment in his selection of tools to carry on the work.

Many a contractor would have saved money on excavation work had he used steel sheet piling.

The use of

United States Steel Sheet Piling

in many cases would have turned a loss into a profit.

The pamphlet—Steel Sheet Piling—contains valuable data and can be obtained from any district office.

The mark of quality **It protects the user**

Carnegie Steel Company

General Offices—Pittsburgh, Pa.

946

CONCRETE PILING

FOUNDATIONS—SPECIAL CONCRETE MASONRY
PILING—CONCRETE, STEEL, WOOD
SIMPLEX CONCRETE PILING METHODS

THE CRANFORD CONSTRUCTION CO.

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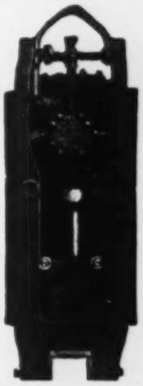
For Driving Sheet Steel Piling, Wood or Concrete Piles, Use

The National Pile Hammer

Here's a double-acting hammer with **only four moving parts**—a hammer that does **all kinds** of pile driving—a hammer that gives maximum service with minimum upkeep—a hammer that

Uses Either Steam or Air With Maximum Economy

—a hammer that is built out of **solid stuff** by practical men **for** practical men—**in short** a hammer that **makes good** all along the line. If interested in that kind of hammer **write.**



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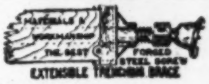
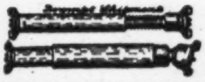
Simple, Strong, Extensible, Forged Steel Screws Guaranteed.





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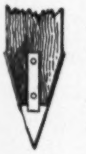

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Janney & Steinmetz
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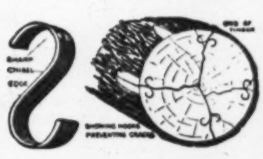

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FREDERICK S. WARDWELL
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Difficult Foundations

Pneumatic, Steel, Concrete and Wooden Pile Foundations. Bridge Piers; Underpinning Heavy Buildings.

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LATEST DESIGNS Orders filled day received
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Special apparatus built to order

Austin Trenching Machines

are ideally constructed to resist digging shocks—With an Austin you're assured of continuous service under the most difficult conditions.

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F. C. Austin Co., Inc.
Formerly F. C. Austin Drainage Excavator Co.
Main Office: Railway Exchange Bldg., Chicago
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The American Steam Shovel

Strictly a Contractors' Shovel. Revolving Type. Handy to operate. Quick in accomplishment. New **catalog. Send for it.**

The American Clay Machinery Co.
Bucyrus, Ohio

UNION EXCAVATOR

Note that the carriage can be operated on an underslung boom. Let us turn your derrick into a steam shovel.

Details await your request.

Union Iron Works
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LADDER TYPE TRENCH EXCAVATORS—DRAINAGE EXCAVATORS
DRAG LINE EXCAVATORS—PIPE LINE TRENCH EXCAVATORS
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Special Bulletin Describing Any of Above Machines, Free on Request.

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River and Harbor Improvements. Waterways and Channels. Sub-Aqueous Rock Removal. Government and Private Work a Specialty.

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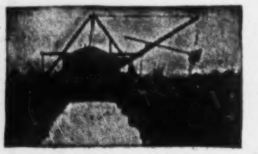
Aqueducts, Subways, Railroad Work, Bridge Piers, Shafts and Tunnels.



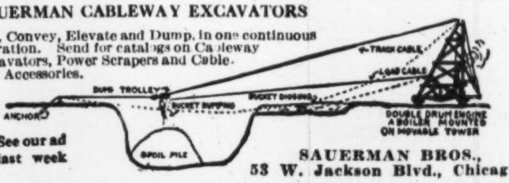
"Walking Land Dredges"

Spans the cut. Built any width. Steel construction. Two men can operate. Equipped with oil engine. Ideal for clean out work.
Write for details.

Bay City Dredge Works
2601 Center Ave. Bay City, Mich.

SAUERMAN CABLEWAY EXCAVATORS

Dig, Convey, Elevate and Dump, in one continuous operation. Send for catalogs on Cableway Excavators, Power Scrapers and Cableway Accessories.



See our ad last week

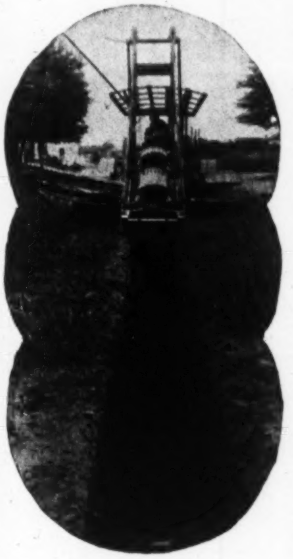
SAUERMAN BROS.,
53 W. Jackson Blvd., Chicago

Built for tough digging

Hard clay, boulders, gumbo, cobbles, concrete road surfaces make just "ordinary" digging for the

BUCKEYE

Traction Ditcher



Built to cut trench excavation costs, the BUCKEYE accomplishes more than 100 men at 1/10 of the cost of hand labor. It digs a perfect trench in one cut—vertical sides and smooth bottom—true to grade and ready for pipe laying, etc.

The BUCKEYE is built rugged and stands up on the hardest kind of work with fewest repairs.

Let us send you data which shows how the BUCKEYE cuts costs on hard jobs.

Write today and be convinced.

BUCKEYE
Traction Ditcher
Company
Findlay, Ohio

Marion

Steam Shovels, Dredges, Draglines and Kindred Machinery

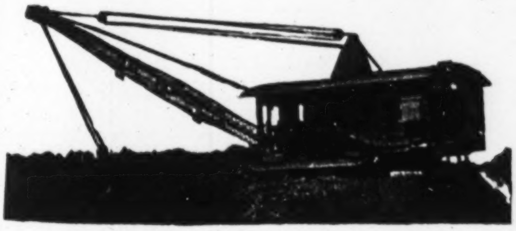
IT takes a hard, impervious clay to build an earth dam that will serve permanently—and it takes a regular steam shovel to dig it at profitable speed. But H. W. Golden & Son, Inc., of Troy, New York, were using a "Marion," so it was all right!

50,000 YARDS HARD MATERIAL —No Repairs But Dipper Teeth

The digging, consisting of hard-pan mixed with stone, proved much harder than expected—and stormy weather caused the loss of one-third to one-half of the total time; yet this "Marion" averaged over 300 yards per day, straight through, finishing up to the owners' great satisfaction.

Carrying the emergency load smoothly and evenly is a part of "Marion's" regular day's work. Ask us for particulars—no obligation to you.

The Marion Steam Shovel Company, Marion, Ohio
Branches: Atlanta, Chicago, New York, Philadelphia, San Francisco, Seattle
216 ESTABLISHED 1884



The Walking Traction

A feature exclusive to Monighan Excavators which the contractor must see in action but once to appreciate.

Over any ground—soft, muddy or rough, it "walks"—the excavator without planks, skids, track or trackmen.

Labor cost is cut, more material handled and the whole job speeded up.

Catalog No. 17 explains these advantages in detail. With it we will send you the name of the user nearest you.

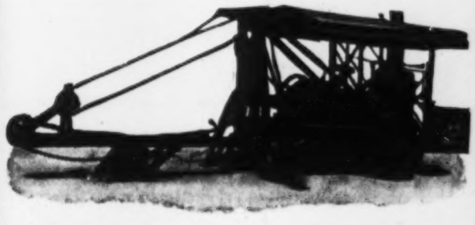
Monighan Machine Co.
2024 Carroll Avenue, Chicago, Ill.

KEYSTONE

Road Grader
Bank Dipper
Ditcher
Cellar Digger
Back Filler

5 in 1

Don't buy 40 tons of equipment if one *Keystone* 10-ton Traction Shovel will take care of all your work.



THE machine is sturdily built and will stand up to hard digging in cemented gravel, shale or old macadam. At the same time it is unusually light (10 tons), has a long wheelbase (10 ft.), with 54-inch tread-wheels and wide tires. No planking necessary on dry ground. Puts minimum strain on light bridges.

Skimmer and Dipper Scoops hold one-half yard. Loads 1½ yard wagon in 1½ minutes. Average daily output 250 to 400 cubic yards. Has dragline ditcher scoop for trenches, cellar digging, back-filling, etc. Ditching capacity 150 to 300 cu. yd. per day. Excavates to a depth of 20 ft.

The eleven-foot horizontal crowding movement and powerful thrust make it more efficient than other machines for shallow grading in hard material.

Saves you money in first cost, operating and moving charge, and upkeep.

Write nearest office for catalog, prices and list of near-by owners.

KEYSTONE DRILLER CO.
BEAVER FALLS, PA.
170 Broadway, New York. Monadnock Block, Chicago, Ill.
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Keystone Well Drilling Machines Downie Deep Well Pumps

STEAM SHOVELS

LIDGERWOOD HOISTS

High Speed Hoists for Operating Coal Towers

The important factor in the operation of a coal tower is the hoist.

The speed of operation is determined by the speed of the hoist. Lidgerwood hoists have the speed.

Their design, material and workmanship minimize the possibility of delay due to breakdowns.

HOISTS—STEAM, ELECTRIC, GASOLINE FOR ALL HOISTING SERVICE

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Derricks, Cableways, Excavators

LIDGERWOOD MFG. CO.

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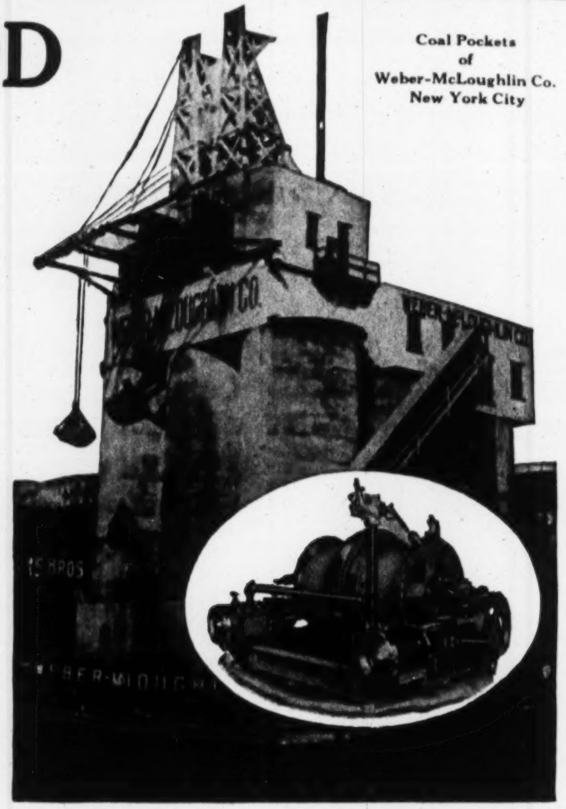


Coal Pockets of Weber-McLoughlin Co. New York City

Economical Excavation is made possible by this Flory two-speed, band-friction, drag-line hoist. Two Werner Patent Band Frictions. Operated by steam; 60-hp. Motor. Operating levers all placed within easy reach of the operator.

Our booklet gives the full description—send for a copy.

S. Flory Mfg. Company
Bangor, Pa.

Flory Hoists

BUFFALO HOISTS AND DERRICKS

The efficient handling of materials or equipment in shipyards, industrial plants, on construction work, etc., is largely a matter of Hoists and Derricks. Our 35 years of experience in building steam, gasoline and Electric Hoists as well as Derricks, Derrick Fittings and Hand Winches, assures you of more than ordinary results.

BUFFALO CONTRACTORS PLANT CORPORATION
BUFFALO, NEW YORK

CLYDE HOISTS

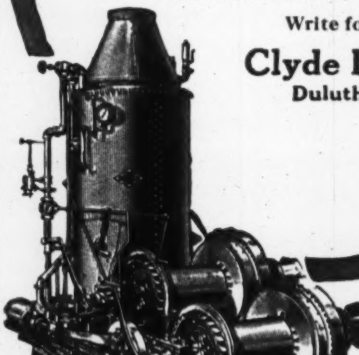
insure the latest and best practice in hoisting.

They are expressly designed for the busy contractor. More material can be hoisted per day at less cost for operation and repairs.

Regardless of the severity of your requirements we can furnish you with a Clyde that will satisfy every demand.

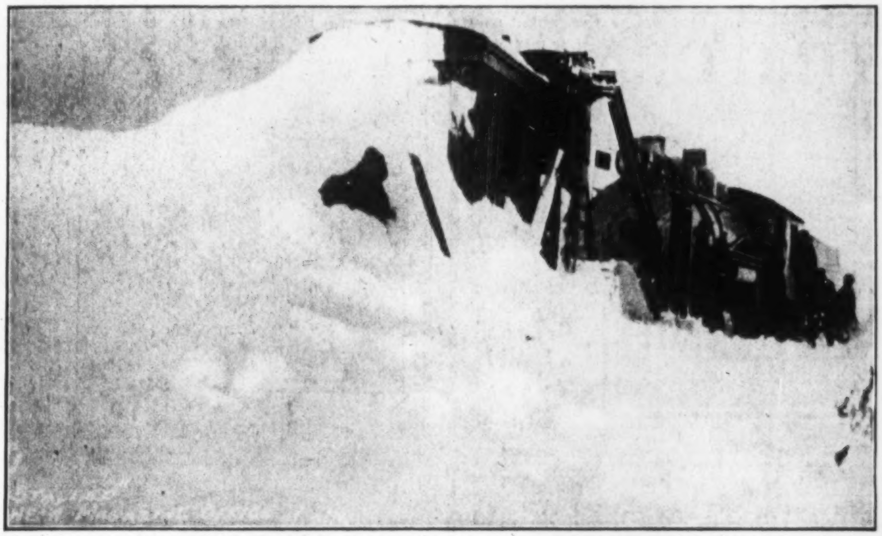
Write for full details.

Clyde Iron Works
Duluth, Minnesota



THE JORDAN SPREADER IS A WONDERFULLY EFFICIENT SNOW PLOW

"Its powerful wings are capable of withstanding tremendous pressure"



The wings may be adjusted to numerous positions to meet varied conditions—Flanger Blades on the lower edge of the plow, flange out either snow or solid ice to a depth of two inches below the top of the rail.—The Jordan does this work so thoroughly that no follow-up crew of hand labor is necessary.

For clearing Freight Yards the Jordan Spreader has no equal. The wings may be arranged to carry the snow across the track and deposit on opposite side if desired.

One man and the train crew are all that are required to operate the Jordan.—It's ready for service day or night,—will work twenty-four hours per day if necessary, **and above all will get results in the shortest time possible.**

The above photograph shows the Jordan on the Bingham & Garfield Ry. in Utah. Last Year's Snows in this section were the heaviest in years. Throughout the winter the Jordan was an immense success in keeping the track clear of snow.

"Does the work of an Army of Men"

Spreads any bulk material 21 feet each way from the center line of track, above or below the rails.

Write or wire for information

O. F. JORDAN CO.

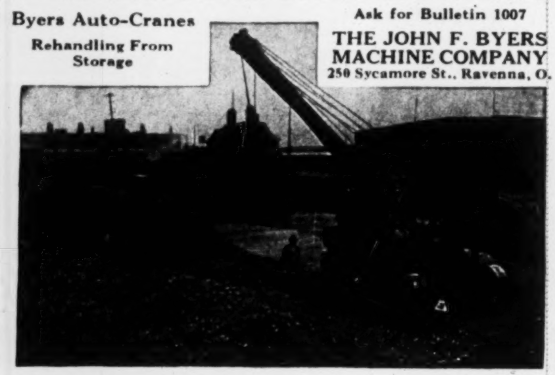
Chicago and Kennedy Aves.
East Chicago, Indiana

The Jordan Spreader is made entirely in our own shops.—We can guarantee deliveries.

Byers Auto-Cranes
Rehandling From Storage

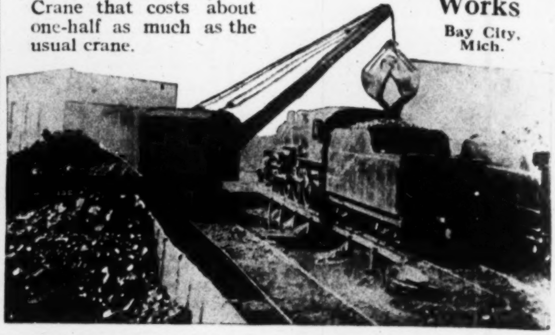
Ask for Bulletin 1007

THE JOHN F. BYERS MACHINE COMPANY
250 Sycamore St., Ravenna, O.



A gasoline operated Industrial Works Coaling Crane that costs about one-half as much as the usual crane.

Industrial Works
Bay City, Mich.



WHITING CRANES

Type "R" Electric Crane Trolley
All gears totally enclosed, running in oil.

Send for New Catalog

Complete Foundry Plants

WHITING
FOUNDRY EQUIPMENT CO
HARVEY-ILL U.S.A.

Cranes of All Types

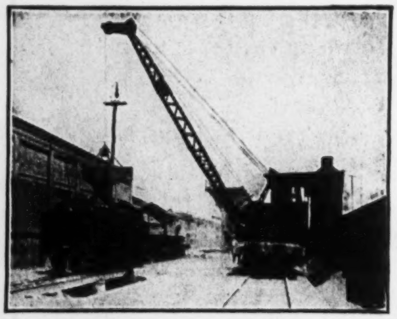
This Photo shows where a 1½-yard

Fogarty Excavating Bucket

replaced a dipper dredge.
Ask the Bay State Dredging Company of Boston, Mass. Then write for our catalog and full particulars.

Rochester Excavating Machinery Co.
Caledonia, N. Y.

—In difficult work the—
O. S. Locomotive Cranes and Buckets
insure satisfaction.



Correct Design
Right Material
Superior Fabrication

Orton & Steinbrenner Co.
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THE ADEN
GRAB BUCKET

The Aden Bucket

A New Design in Engineering

which makes for **more** and **better** work—no matter how tough the job.

Stop Picking Pick the Aden

Write for specifications

The Advance Engineering Company
Cleveland, Ohio

BROWNING
LOCOMOTIVE CRANES
Wrecking Cranes, Railroad Ditchers, Revolving Steam Shovels, Pile Drivers, Buckets
THE BROWNING CO., CLEVELAND, OHIO, U. S. A.
Sales Offices: New York, Chicago, San Francisco

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Cranes and Hoists
Heavy Dock Machinery, Bridge Cranes, Locomotive Cranes, Buckets, Tramrail Systems, etc.
The Brown Hoisting Machinery Co.
Cleveland, O., U. S. A.

ECONOMY EXCAVATOR

4 Buckets a minute is its record. A lightweight, broad-gage machine for Ditches, Highways, Stripping, Loading and Unloading Material, Laying Sewer Pipe and Tile.

Write for the Economy Book.

The Economy Excavator Co.
500 Washington Ave., Iowa Falls, Ia.
Successor to Gade Excavator Co.

11 Years Old and Still Young

This Williams 1½-yd. Type "B" Bucket started to work for the Erie Sand & Gravel Co. at Erie, Pa., in 1906. The picture shows it on March 3, 1917. This company uses Williams Buckets exclusively.

Williams Bucket

"Built to Dig and Last While Digging"

They live up to their name. They are built to give constant service. Built with large bearings and with well-guarded cables. They hold their alignment and stand the gaff in all kinds of digging and handling.

Special types to suit your work.

Write for the latest Williams Catalog.

The G. H. Williams Company
Erie, Penna.

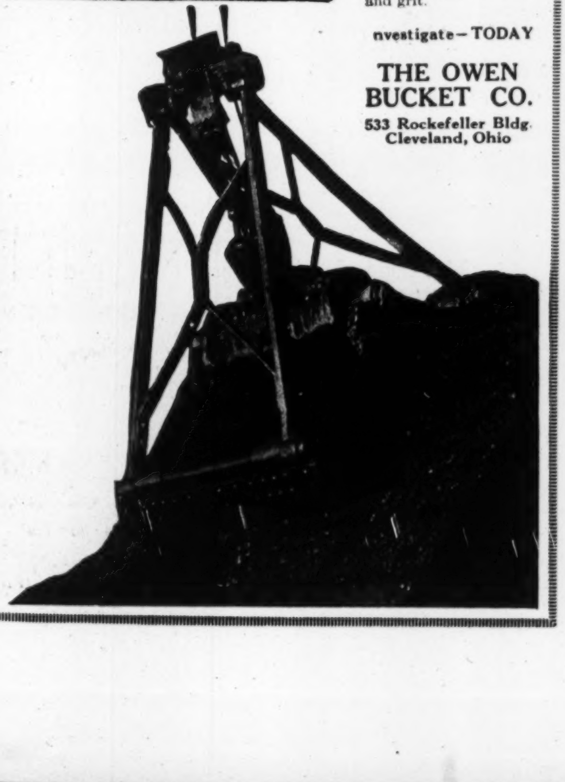
Owen Buckets

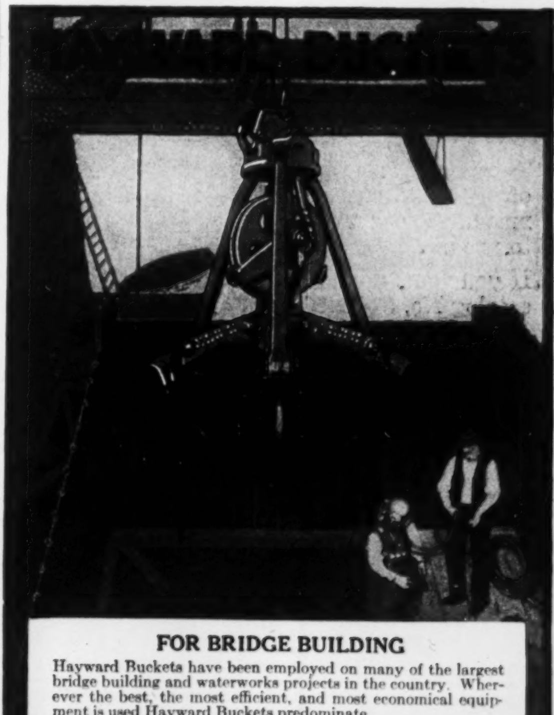
meet every material re-handling requirement. Their adjustable features of weight and closing power make them equally efficient in loose material in the stock pile as in packed material in cars.

All bearings lubricated and protected from dirt and grit.

nvestigate—TODAY

THE OWEN BUCKET CO.
533 Rockefeller Bldg.
Cleveland, Ohio



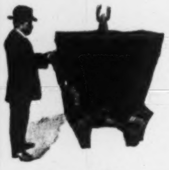


FOR BRIDGE BUILDING

Hayward Buckets have been employed on many of the largest bridge building and waterworks projects in the country. Wherever the best, the most efficient, and most economical equipment is used Hayward Buckets predominate.

Choice of Clam Shell, Orange Peel, Drag Scraper and Electric Motor Buckets. **Catalog 43.** 2428-Y

THE HAYWARD COMPANY, 50 Church St., New York



Controllable Bottom Dump Bucket (Patented)

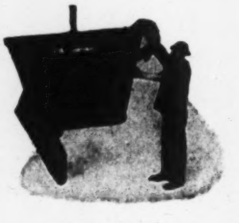
The full Stuebner line consists of Coal Hoisting, Mining, Excavating and Bottom Discharge Buckets — Steel Skips — Side and End Tip, Rotary Dump, Drop Bottom and Boiler Room Cars—Asphalt, Tar and Lead Melters, Hand Dump Carts, etc., etc.

Big Handling Capacity

and extreme durability are the foremost features of the

STUEBNER Hoisting Buckets

These steel buckets positively excel in efficiency. They effect a large money saving to the contractor on all work involving the handling of bulk material. *Write for Catalog "N."*



"Excelsior" Bottom Dump Concrete Bucket (Patented)

"Invincible" Bottom Dump Bucket (Patented)

Consult us on any bucket problem.

Self-Dumping and Self-Righting Turnover Bucket

G. L. Stuebner Iron Works

West 11th St., Long Island City, New York, N. Y.

Single Closing Sheave Orange Peel Dredging and Excavating Bucket

The construction of this bucket is most substantial, being made of homogeneous steel plate of 60,000 pounds tensile strain. Bearings are steel bushed, removable and easily replaced.

The four blades which form the main body of bucket are made extra heavy, with the points reinforced and welded, insuring well-hardened points for penetration.

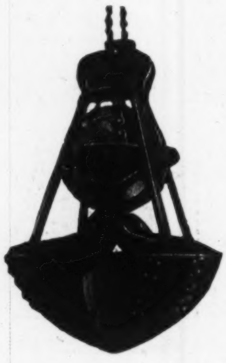
The lower casting on crosshead is made of cast steel, and likewise the top casting which receives the arms. The arms are made of heavy forged iron and steel bushed.

All sizes in stock for immediate shipment. We build buckets of all types.

Send for Catalogue

Theo. Smith & Sons Company

Jersey City, N. J. U. S. A.



HAISS "High Power" BUCKET

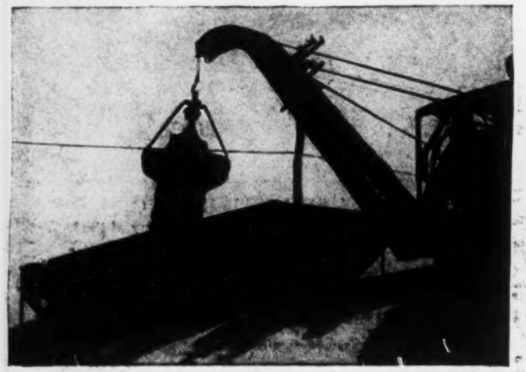
digging iron ore at Berkshire Iron Works, Sheridan, Pennsylvania.

They say: "It is the best bucket that we know of. We have an ordinary clam-shell bucket made by another concern that we were unable to use at all."

If you want a bucket that will dig, write for catalog No. 614 NOW.

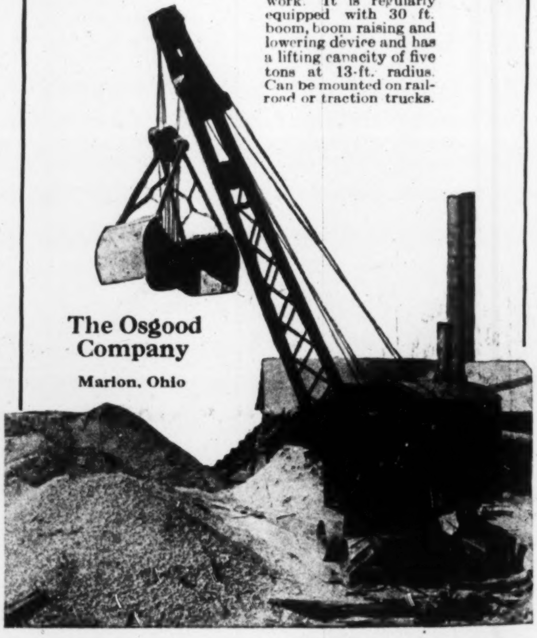
GEORGE HAISS MFG. CO., Inc.

140th St. and Rider Ave. New York



OSGOOD 18

For Clam Shell or Crane work. It is regularly equipped with 30 ft. boom, boom raising and lowering device and has a lifting capacity of five tons at 13-ft. radius. Can be mounted on railroad or traction trucks.



The Osgood Company

Marion, Ohio

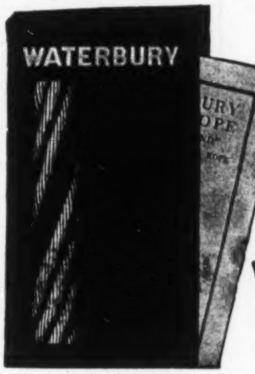
WIRE ROPE

WATERBURY
FOUNDED 1816

The Why and Wear

of wire rope is completely and interestingly set forth in the handy 100-page Catalog shown here.

Kinks are not desirable in wire rope, but the kinks on the selection, use and care of wire rope given in this book are of the money-saving kind. Fifty-one separate subjects are fully treated of and the catalog is replete with illustrations and tables.



This book fits into the pocket and into the day's work. We will mail a copy on request. No charge.

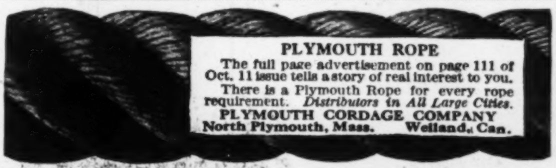
WATERBURY COMPANY
63 PARK ROW, NEW YORK
CHICAGO, 1315-1321 W. Congress St.
SAN FRANCISCO, 151-161 Main St.
DALLAS, TEX., A. T. Powell & Co.
NEW ORLEANS....1018 Maison Blanche Bldg. 2216-W

American Wire Rope
GRAND PRIZE

FOR elevators, dredges, lumbering, mining, oil-well drilling, suspension bridges, stump-pulling, cranes, derricks, ships' rigging and every other form of wire rope use.

Ask for illustrated catalogue

American Steel & Wire Company
Chicago New York Cleveland Pittsburgh Worcester Denver
Export Representative: U. S. Steel Products Co., New York
Pacific Coast Representative: U. S. Steel Products Co.
San Francisco Los Angeles Portland Seattle



PLYMOUTH ROPE

The full page advertisement on page 111 of Oct. 11 issue tells a story of real interest to you.

There is a Plymouth Rope for every rope requirement. *Distributors in All Large Cities.*

PLYMOUTH CORDAGE COMPANY
North Plymouth, Mass. Welland, Can.

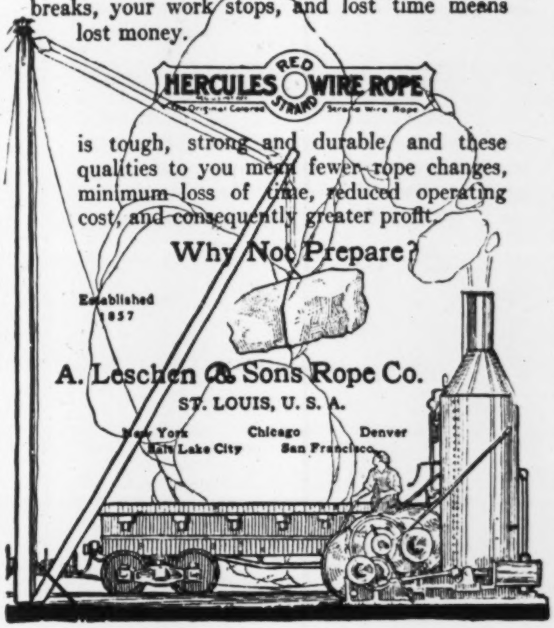
ROEBLING

WIRE
ROPE
AND
WIRE

John A. Roebling's Sons Co., Trenton, N. J.

PREPARE *for* PROFIT!

THE margin of your profit and the volume of your output depend largely upon the efficiency of your equipment. When your rope breaks, your work stops, and lost time means lost money.



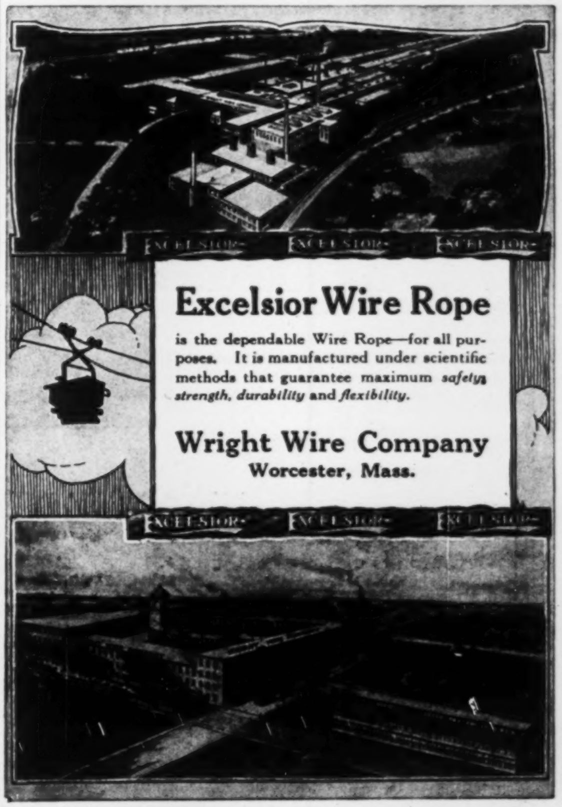
HERCULES RED STRAND WIRE ROPE
The Original Colored Strand Wire Rope

is tough, strong and durable, and these qualities to you mean fewer rope changes, minimum loss of time, reduced operating cost, and consequently greater profit.

Why Not Prepare?

Established 1857

A. Leschen & Sons Rope Co.
ST. LOUIS, U. S. A.
New York Chicago Denver
Salt Lake City San Francisco



Excelsior Wire Rope

is the dependable Wire Rope—for all purposes. It is manufactured under scientific methods that guarantee maximum *safety, strength, durability* and *flexibility.*

Wright Wire Company
Worcester, Mass.

The End of the Calendar Year

This week sees the end of another year. Another twelve months have been written into the history of water supply.

The year has seen a greater number of water-works creep closer to their ultimate ideal of absolute efficiency. Once having started, the movement towards efficiency gains headway gradually—adding to its speed each year.

The entrance of this country into the war, and its consequent lesson that the nation in all its branches requires more efficiency, more *exact knowledge*, has given an added impetus to the movement.

The water-supply field is accounting for more of the water it pumps. And it is being paid for more. It is installing more water meters to *insure* that it will be paid for all the water supplied.

And it is insisting more and more that *better* meters be installed. Its viewpoint is that differences in continuous accuracy, durability and maintenance-cost obscure as an insignificant trifle the necessary difference in first-cost.

More TRIDENTS are being installed!

More than a million and a half now in service!

NEPTUNE METER COMPANY

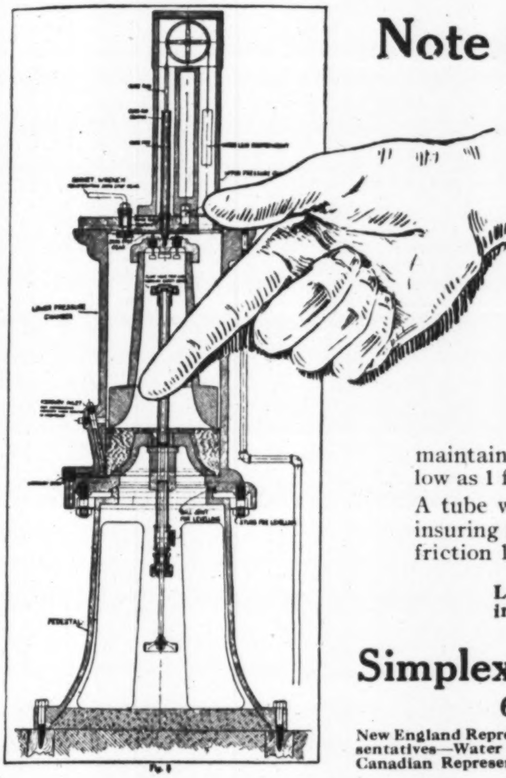
Manufacturers of Trident Water Meters—The Weber Subterranean Pump

50 East 42nd Street, New York City

BRANCHES:

Chicago Atlanta Boston Los Angeles San Francisco

Portland Denver Cincinnati Seattle



Note the Simple Direct Action

The movement of the indicator pointer and the recording pen arm takes place directly from the specially shaped float which rises and falls in the mercury in exact proportion to the flow through the meter tube in the pipe line.

There are no intervening cams, links, levers, gears or racks to cause inaccuracies due to friction, back lash or lost motion.

That is why the

SIMPLEX WATER METERS

maintain an accuracy exceeding 99 per cent. down to flows as low as 1 foot per second through the Venturi tube throat.

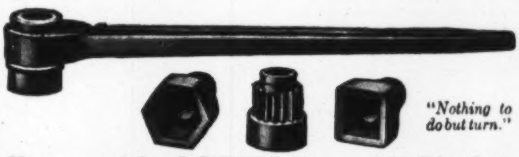
A tube with a wide throat area may therefore be employed, insuring a positive saving in pumping cost due to the reduced friction losses.

Let us advise you on any water, air or gas measuring problem. Write for Bulletin No. 113.

Simplex Valve & Meter Company

625 Wood Street, Philadelphia, Pa.

New England Representative—Geo. W. Stetson, 141 Milk St., Boston, Mass. Pacific Coast Representatives—Water Works Supply Co., San Francisco and Los Angeles.
Canadian Representatives—Francis Hankin & Co., Montreal, Toronto and Vancouver.



"Nothing to do but turn."

Your need for LOWELL Reversible Ratchet Wrenches is urgent

If you can use the safest, surest and quickest ratchet wrench on the market—

A wrench particularly adapted for use on bridge work or other jobs where nuts have to be seated or removed in a cramped space—

Send for Catalog R which give the full story of the Lowell Reversible Ratchet Wrench, TODAY.

LOWELL WRENCH CO., 50 Commercial St., Worcester, Mass.

NEW YORK CHICAGO

Keystone and Eureka

Water Meters

Pittsburgh Meter Co.
East Pittsburgh, Pa.

COLUMBIA, S.C. KANSAS CITY

LOS ANGELES SEATTLE

IRRIGATION METERS

The Reliance Irrigation Meter is of simple construction, low in cost, always accurate, easily read. There are no bearings under water, no clocks, no ink or pencil or paper. Registers by same method as ordinary house meter.

Ask for the Booklet.

Hydrometric Company
108 West 6th Street Los Angeles, Cal.

DE LAVAL STEAM TURBINE CO.
TRENTON, N. J.

Builders of TURBINE MACHINERY, including Steam Turbines of all capacities for high or low-pressure steam and for direct connection or for belt or rope drive. Complete Turbo-Generator Sets. Centrifugal Pumps for all Heads and Capacities. Centrifugal Blowers and Air Compressors. Double Helical Speed Reducing Gears.

Write for special bulletins on apparatus in which you are interested.

IF YOU DO NOT FIND WHAT YOU WANT

in the NEWS-RECORD, write us and we will try to get it for you.

Coffin Valve Co.
BOSTON, MASS.
Makers of the Largest Sluice and Gate Valves in America.

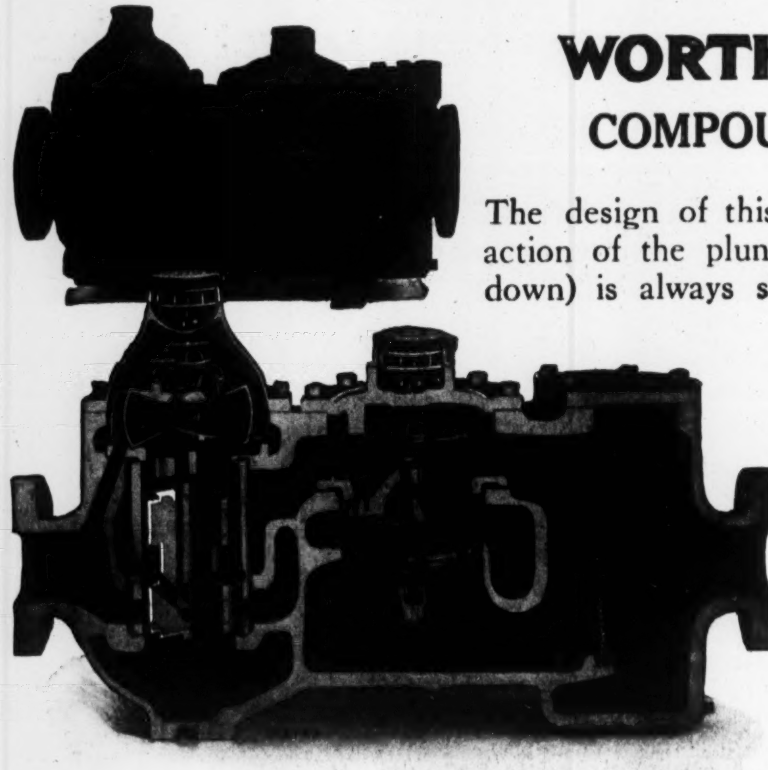
Sluice Gates
Gate Valves
Butterfly Valves
Fire Hydrants

Check Valves
Flap Valves
Foot Valves
Sewer Gates

Hydraulically, Electrically and Hand Operated Gate Valves and Sluice Gates

For Waterworks, Power Plants and Filtration Systems

Write for Catalog



WORTHINGTON

COMPOUND METER

The design of this meter is such that the action of the plunger valve (both up and down) is always sharp and positive; "no breaking point" in the registration where the flow changes from the disc to the turbine meter, or vice versa, when the point of change is reached.

Send for Catalog W809-42.

Worthington Pump and Machinery Corporation
115 Broadway, New York
Works: Harrison, N. J.

W375-4

BEST RESULTS BY NUMEROUS AMERICAN AND EUROPEAN INSTALLATIONS

AUTOMATIC GATES

American patents controlled by the owners,
BARRAGES AUTOMATIQUES S.A.,
ZURICH, SWITZERLAND

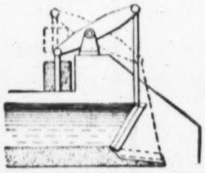
FARGO ENGINEERING CO., JACKSON, MICH.
Eastern American Representative

Agents wanted in the Western States.

FOR THE CONTROL OF WATER LEVEL

—

MANY STYLES



AMERICAN AND NIAGARA
WATER METERS
[illegible]ETER CO.
[illegible]O.N.Y.

KENNEDY VALVES

for handling water, gas, oil, steam, etc. For high pressures and low. Prompt shipment from stock.

THE KENNEDY VALVE MFG. CO. ELMIRA, N.Y.

81 John Street
New York

French Savings Bank Bldg.
San Francisco

SLUICE GATES

Shear, Flap and Butterfly Valves

FLEXIBLE JOINTS

COLDWELL-WILCOX CO

NEW WINDSOR NEWBURGH N.Y.

Nicholas Engel

JOHN FOX & CO.

Cast-Iron Water, Gas and Flange Pipe, Special Castings, Fire Hydrants, Valves, General Foundry and Machine Work.

253 BROADWAY NEW YORK CITY

Gives a Record Chart of varying depths for **RIVERS, SEWERS, HARBORS, WELLS**

Used and approved by Boston, Chicago, New York, Philadelphia and many corporations.

Sold on approval.

SANBORN COMPANY
79 Sudbury Street, Boston, Mass.

CHAPMAN VALVES

Chapman Service

comprises full cooperation with waterworks engineers. Tell us what you need—we'll help design and build the valves.

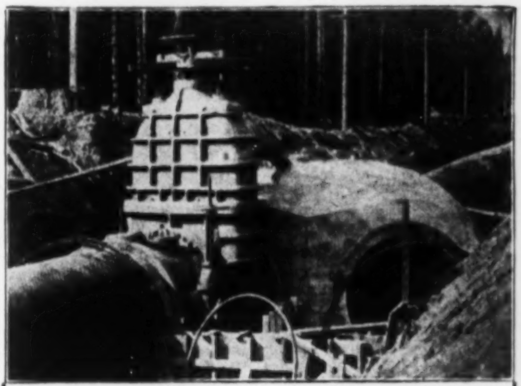
The Chapman Valve Mfg. Co.
Indian Orchard, Mass.

Branch Offices and Agents with Stock in Principal Cities

MICHIGAN PRODUCTS

Fire Hydrants
Gate Valves
Sluice Gates
Check Valves
Foot Valves
Shear Valves
Tide Valves
Sleeve Valves
Indicator Posts
Valve Boxes

Flower-Stephens Mfg. Company
107 Parkinson St., Detroit, Michigan



This big valve

regulates water for different units so that repairs may be made without interfering with the running of the generators in the power house.

It is a

CRANE

72 inch Standard
Iron Body Wedge

GATE VALVE

used under a hydraulic working load of 125 pounds per square inch, with a large factor of safety. Weight 26 tons.

Our new catalogue No. 50 describing our entire line of 17,000 articles, is now ready for distribution.

Branches in 53 leading cities

FOUNDED BY R. T. CRANE, 1855
CRANE CO.
836 S. MICHIGAN AVE.
CHICAGO

Works: Chicago and Bridgeport

This Sanitation R-W Process Sewage Treatment Plant is Located Near Summer Resort Buildings

No Nuisance Experienced

The Sanitation R-W Process provides for immediate treatment of fresh sewage. It can therefore be located in the heart of inhabited districts and is often the means of saving long pipe lines.

The Sanitation Process can be housed in a small building—it is a concentrated, efficient, sewage treatment process.

Write for our large descriptive bulletin G-4 with full particulars.

THE SANITATION CORPORATION, 50 CHURCH STREET, NEW YORK

Use Liquid Chlorine

To Sterilize Your Water Supply

It is the most efficient sterilizing agent

BUT

control it with

"W&T" APPARATUS

Send for Technical Publication 1 R with full details

Wallace & Tiernan Co., Inc.
137 Centre St., New York City
Chicago San Francisco

PURE WATER AT LOW COST

Pittsburgh filters develop the lowest operating costs consistent with thorough purification.

Each plant is installed after a study of local conditions.

Write us fully what your requirements are, PER HOUR; what the water is to be used for. Give a description of the arrangement of your plant and space, and as complete information as possible as to character of water to be purified.

We will advise you.

PITTSBURGH FILTER MFG. CO.
PITTSBURGH, PENNA.
CHICAGO KANSAS CITY

"COREY" FIRE HYDRANTS

Valve Boxes Indicater Posts Air Valves

"RENSSELAER" VALVES

All Sizes All Pressures All Purposes

Rensselaer Valve Co., General Offices, Troy, N. Y.
New York, Hudson Terminal, Church St.
Chicago, Monadnock Block
Pittsburgh, Oliver Building
Seattle, Colman Building
New England, Chas. L. Brown, Northboro, Mass.

SLUICE GATES, CHECK VALVES, INDICATOR POSTS, ETC.

OUR LINE

GATE VALVES

EDDY

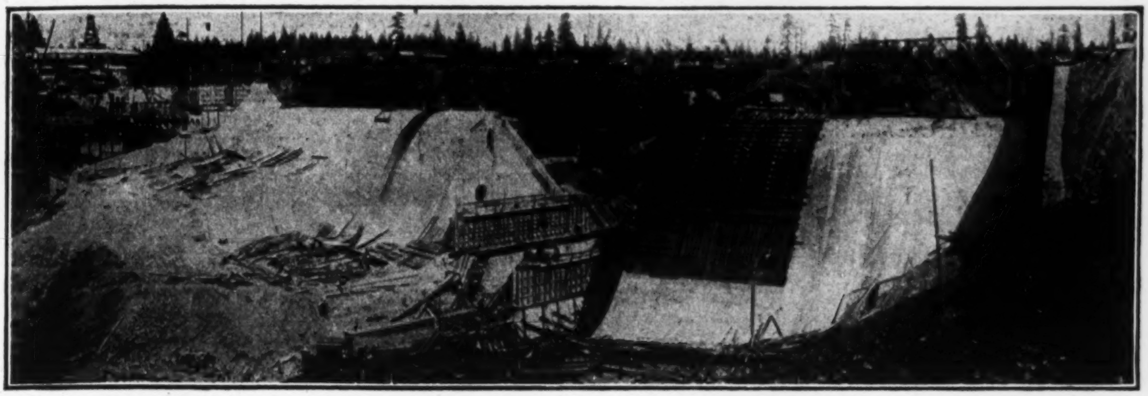
FIRE HYDRANTS

Hydraulically and Electrically-Operated Valves and Sluice Gates
Valves Designed for all Kinds of Service.

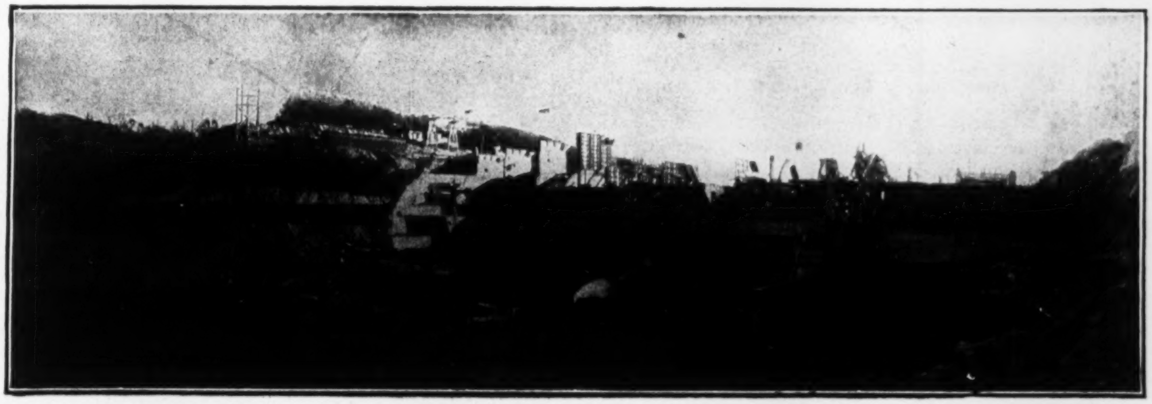
EDDY VALVE COMPANY, WATERFORD, N. Y.
New York Chicago Boston San Francisco Philadelphia

AMBURSEN Dams During Construction

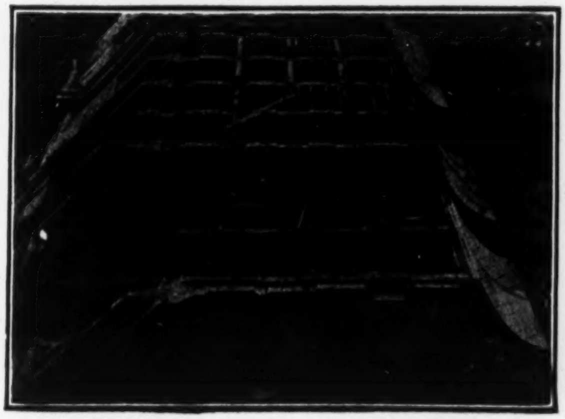
This type of structure has been used for all heights up to 150 feet and for all classes of foundation. It can be built in less time and for less money than any other permanent type.



PORTLAND, RY. L. & P. CO. **RIVER MILLS, OREGON**



CONSUMERS POWER CO. **RAPIDAN, MINN.**



GEORGIA RY. L. & P. CO. **MATHIS, GA.**

JUNIATA HYDROELECTRIC CO. **HUNTINGDON, PA.**

AMBURSEN CONSTRUCTION CO., Inc., 61 Broadway, NEW YORK

(Owners Ambursen, Church, Coburn and Whitehead Patents)

GRAVITY **PRESSURE**

FILTERS

Water Softening Plants
Hypochlorite Apparatus

and all Sorts of Chemical Feeding Devices

Over 350 Municipal Filtration Plants
Installed—Total Daily Capacity
900,000,000 Gallons

Write for Bulletin 15 1

THE NEW YORK CONTINENTAL
JEWELL FILTRATION COMPANY
15 BROAD STREET, NEW YORK

Inter-State Building, Kansas City, Mo.; 111 W. Monroe St., Chicago, Ill.; New Birks Building, Montreal.

Originators of Mechanical Filtration

This Was the Silver Lining in Denver's Cloud

Denver's citizens were swept with Typhoid. She tried filtration but still lost 48 in every 100,000 yearly.

A great cloud hung over Colorado's Metroplis. Finally she adopted

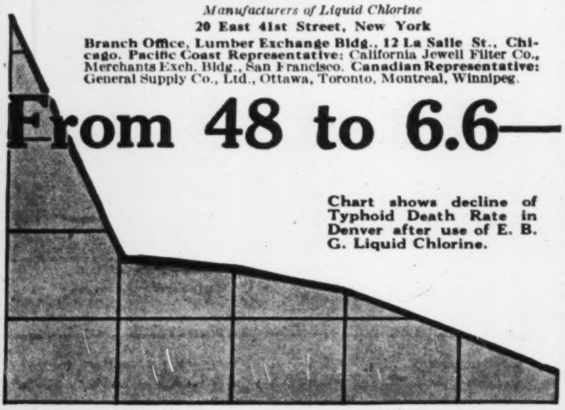
Liquid EBG Chlorine

The chart below tells the story.

E.B.G. Liquid Chlorine — and the typhoid rate dropped from 48 to 6.6! **Write for "The Wise Cities."**

ELECTRO BLEACHING GAS COMPANY
Manufacturers of Liquid Chlorine
20 East 41st Street, New York

Branch Office, Lumber Exchange Bldg., 12 La Salle St., Chicago. Pacific Coast Representative: California Jewell Filter Co., Merchants Exch. Bldg., San Francisco. **Canadian Representative:** General Supply Co., Ltd., Ottawa, Toronto, Montreal, Winnipeg.



From 48 to 6.6—

Chart shows decline of Typhoid Death Rate in Denver after use of E. B. G. Liquid Chlorine.

Mechanical Filtration Plants

Municipal and Industrial Purposes
Gravity and Pressure Types

Re-filtration Systems
for Natatoriums

The "Holyoke" Fire Hydrant

FOR TOWNS, CITIES AND FACTORIES

One of the Oldest
One of the Best

IN USE OVER 35 YEARS

It will pay you to send us your inquiries

Norwood Engineering Company
Florence, Mass., U. S. A.

WATER SOFTENING AND FILTRATION PLANTS

AMERICAN WATER SOFTENER COMPANY
1009 CHESTNUT ST. PHILADELPHIA, PA.
No affiliation or working agreement with any of our competitors

AFTER CLEANING

Clean Water Mains
Deliver Full Capacity

We are glad to confer
with municipal officials
or Water Companies.

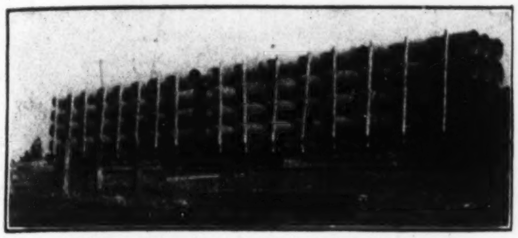
National Methods are patented

National Water Main Cleaning Company,
54 Church Street
New York

Roberts Filter Mfg. Co.
Darby, Penna.
WATER FILTERS for Municipal and Industrial Plants
Gravity and Pressure Types.
CHEMICAL DEVICES

WATER SOFTENING AND FILTRATION PLANTS
INTERNATIONAL FILTER CO.
30 South Dearborn St., Chicago
New York Office: Woolworth Building

Wire Wound and Continuous Stave Wood Pipe for IRRIGATION and Water Systems. Asbestos and tin-lined Cedar Casings for insulating underground steam pipes.



30-in. Wire Wound Pipe for U. S. Reclamation Service

AMERICAN WOOD PIPE CO.
TACOMA WASHINGTON, U. S. A

Wood Stave Pipes Have Low Construction Costs

Built at the job—save freight and handling charges.

Joints need no expensive caulking. Pipe easily tapped.

Our engineering department is at your service to help solve your hydraulic problem.

Pacific Coast Pipe Co., Seattle, Wash.
Manufacturers of Machine Wire-Wound and Continuous Stave Wood Pipe.

PIPING FACTS

of interest are contained in the Washington P. & F. Co.'s book. The knowledge of experts has gone into it—men who have a means of solving the piping difficulty that perchance now conforts you.

Today is a good day to send for your copy.

Washington Pipe & Foundry Co.
Tacoma, Washington
New York Office, Woolworth Bldg.

Portland is the Perfect Pipe

Made of the finest old growth Oregon or Douglas Fir, Portland Wood Pipe is cheaper than iron or steel pipe yet of greater efficiency.

Portland Wood Pipe Co., Portland Oregon

Wood Water Pipe

We build machine banded and with individual rods and lugs stave water pipe, from 2" up to 48" for various pressures. Write for our catalogue. It tells you all.

Standard Wood Pipe Co.
Williamsport, Penna.

NATIONAL

National Quality Counts in Cost and Service, Too

Many years of experience have given us the ability to understand and help our customers solve their pipe and tank problems.

Douglas Fir and California Redwood give us the materials that last and last—always 100% efficient. Get our prices.

Full information and Catalogs on request.

NATIONAL TANK & PIPE CO.
275-M Oak St.,
Portland, Ore.

WHY DON'T YOU USE

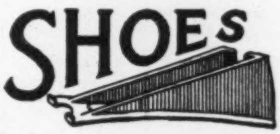
Wyckoff Wood Pipe

OTHERS DO

Over 1000 miles of Wyckoff Wood Pipe have been installed in the last three years. It can be furnished and laid at half the cost of cast iron.

IT LASTS AS LONG.

A. WYCKOFF & SON COMPANY
ELMIRA N. Y.
378 Piedmont Ave., Atlanta, Ga.
Johnson-Peters Co., Pittsburgh Terminal Warehouse, Pittsburgh, Pa.
551 West 14th Place, Chicago, Ill.



Marion Shoes for Wood Pipe

are the result of 25 years' endeavor to produce a light-weight, efficient shoe.

SHOES
FOR ANY SIZE
WOOD PIPE
TO WITHSTAND
ANY PRESSURE

This study and experience may be used to your advantage—

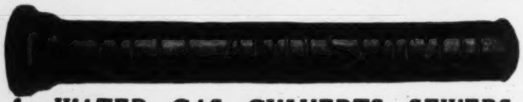
Acquaint us with your problem.

The Marion Malleable Iron Works
Marion, Indiana

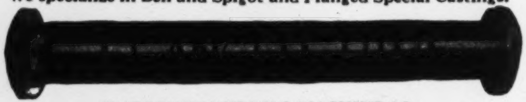
THE FIRST CAST IRON PIPE EVER MADE IN THE WORLD'S HISTORY IS STILL IN SERVICE
SERVICE
CAST IRON PIPE
MEASURED BY
CAST IRON PIPE
CENTURIES
MORE THAN 250 YEARS OLD

The Cast Iron Pipe Publicity Bureau
1 Broadway, New York

Manufacturers of **CAST IRON PIPE**

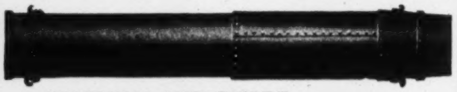


for WATER—GAS—CULVERTS—SEWERS
SPECIAL CASTINGS
Also Flexible Joint Pipe—Cylinders—Tubes, Milled and Plain Ends—High Pressure Fire Service Pipe.
We specialize in Bell and Spigot and Flanged Special Castings.



WARREN FOUNDRY & MACHINE CO.
Works: Phillipsburg, N. J. Sales Offices { Bowling Green Bldg., N. Y.
201 Devonshire St., Boston, Mass.
"Quality and Service Guaranteed"

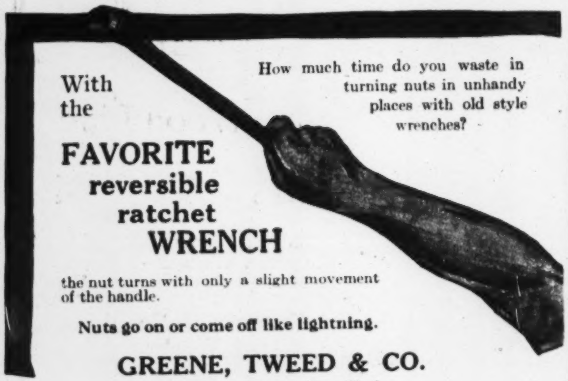
Dredge Pipe



PONTOON AND SHORE
Elbows, Branches, Ball Joints, Valves, Steel Pontoons
MACHOLD & RIDDELL, Stephen Girard Building
PHILADELPHIA, PA.

AMERICAN CAST IRON PIPE COMPANY
MANUFACTURERS OF

BIRMINGHAM, ALA.
SALES OFFICES:
Birmingham, Ala.—Box 908.
Columbus, Ohio—607 New Hayden Bldg.
Minneapolis, Minn.—712 Plymouth Bldg.
New York City—No. 1 Broadway.
Chicago, Ill.—512 1st Nat. Bk. Bldg.
Dallas, Tex.—1217 Praetorian Bldg.
Kansas City, Mo.—716 Scarritt Bldg.
San Francisco, Cal.—711 Balboa Bldg.



With the

FAVORITE reversible ratchet WRENCH

How much time do you waste in turning nuts in unhandy places with old style wrenches?

the nut turns with only a slight movement of the handle.

Nuts go on or come off like lightning.

GREENE, TWEED & CO.
109 Duane Street, New York

TRADE **"LEADITE"** MARK
Registered U. S. Patent Office

Requires No Caulking
For Jointing Cast-Iron Water Mains

Leadite lessens labor. It fills every crevice from the yarn out to face of bell. Saves 50% to 65%. The efficient water main joint. Write for information. Specify Leadite.

"Leadite Joints Increase in Strength With Age"

THE LEADITE COMPANY, Inc.
Land Title Building PHILADELPHIA, PA.

TAYLOR'S SPIRAL RIVETED PIPE

Spiral Riveted Pipe. Large Diameter. Lap Welded Pipe. Forged Steel Pipe Flanges. Flexible Ball Joints. Send for Catalog
AMERICAN SPIRAL PIPE WORKS
50 Church St., New York Main Office and Works; CHICAGO, Box 485

Take Advantage of Lynchburg Service
Cast Iron Pipe and Specials
Half a century's experience, enormous production facilities and three strategic shipping points assure highest quality and on-time delivery.
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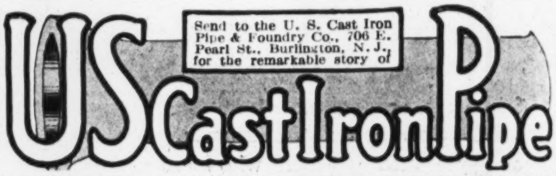

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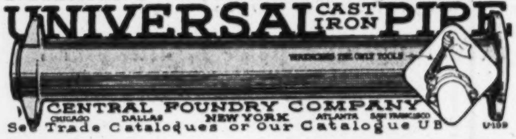

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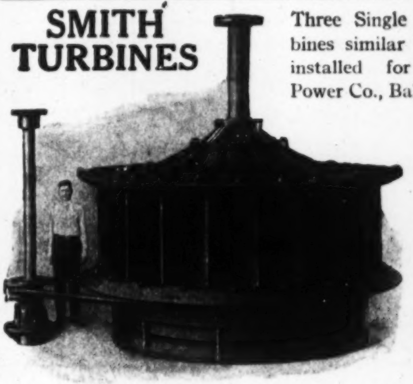

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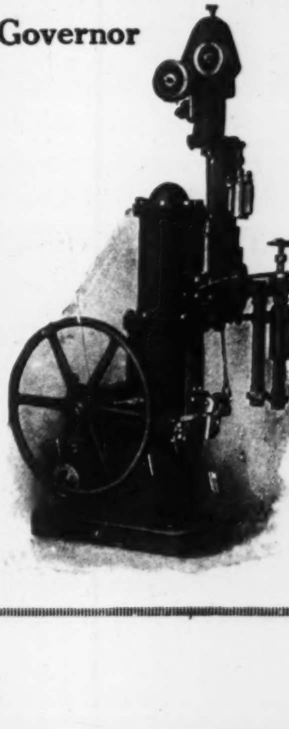

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.70	16 ft.	200	8705	230.00	87.35
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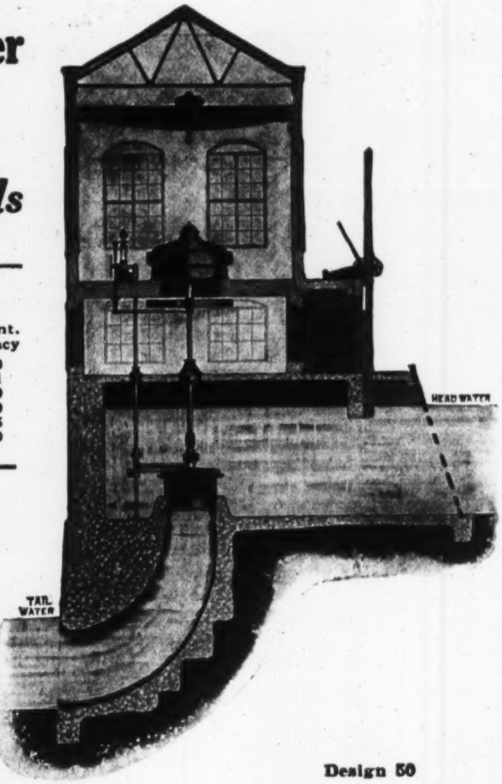

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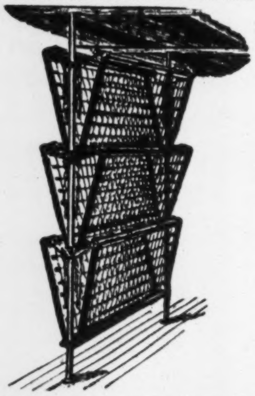

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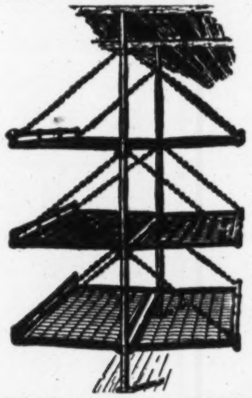

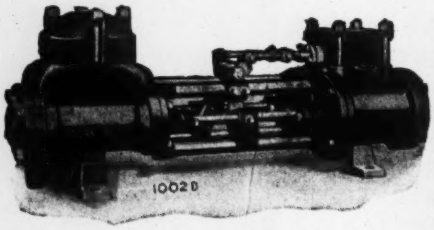

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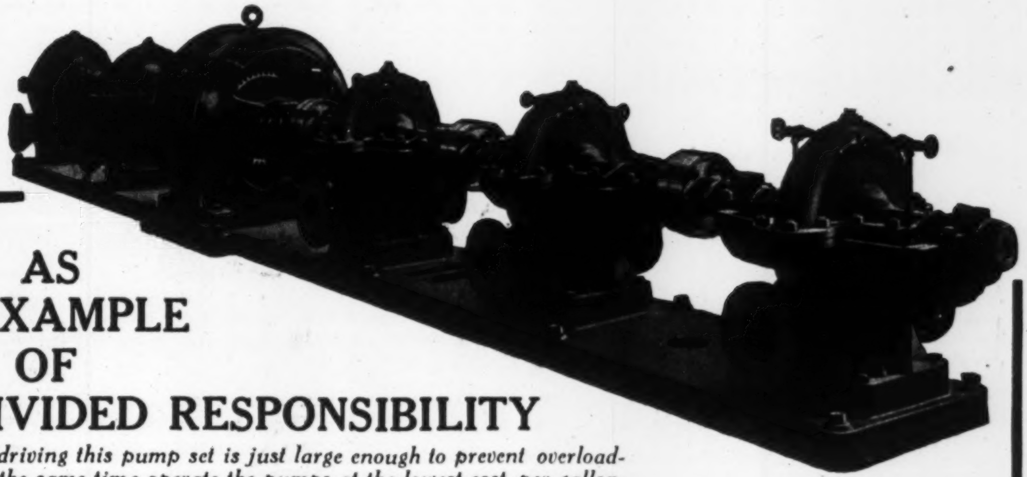

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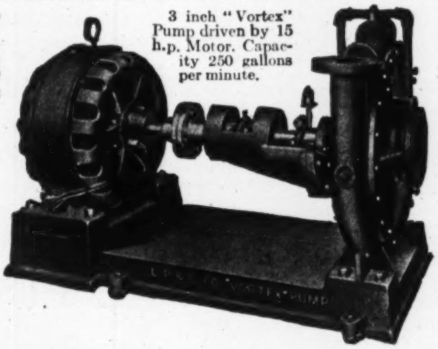

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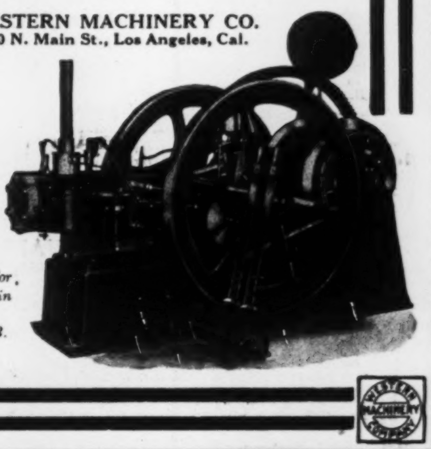

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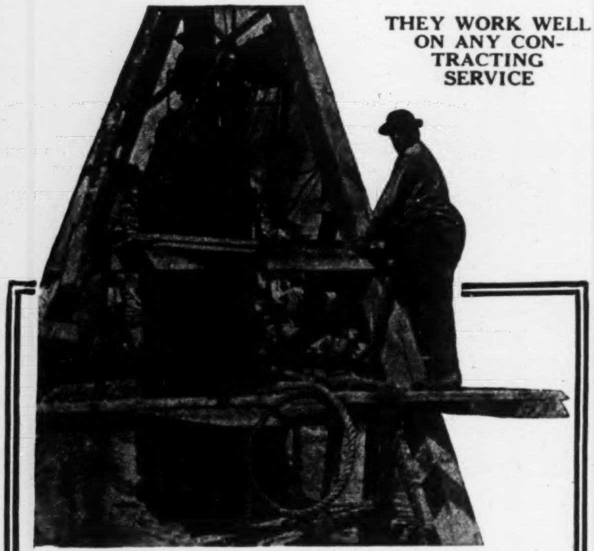

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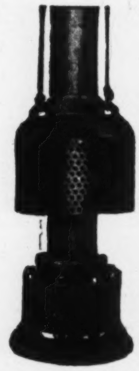

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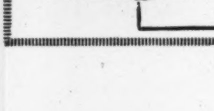

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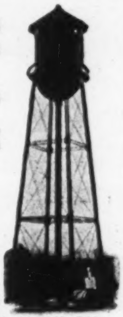

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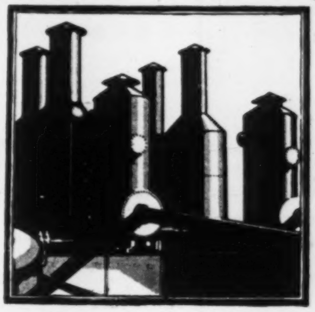

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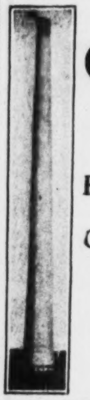

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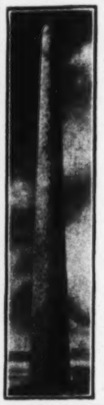

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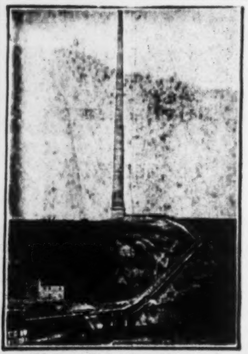

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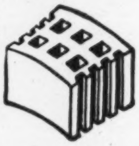

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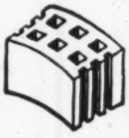

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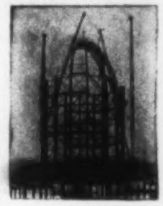

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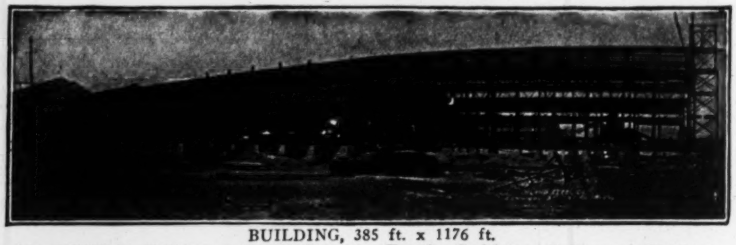

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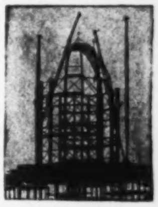

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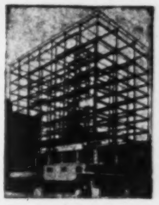

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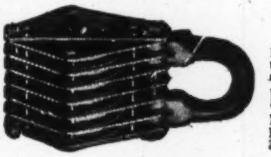

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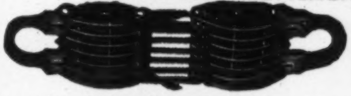

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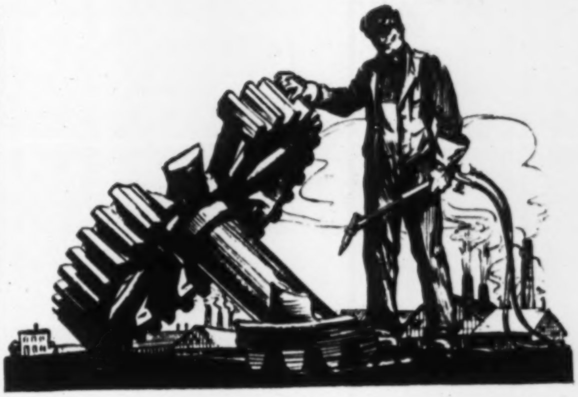

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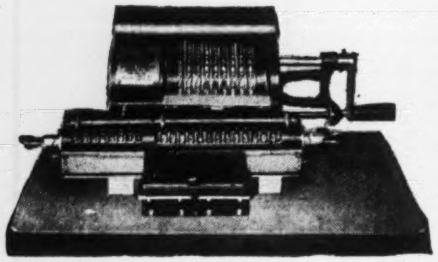

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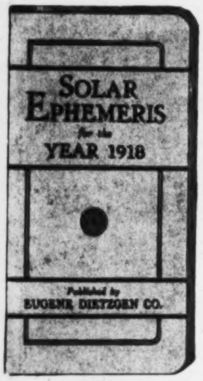

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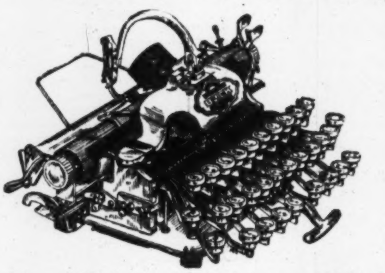

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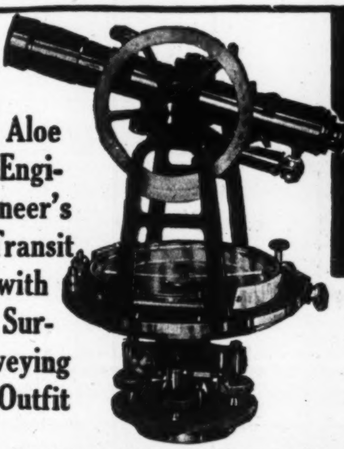

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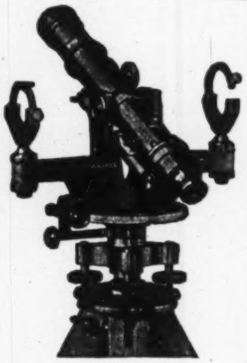

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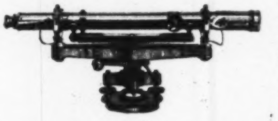

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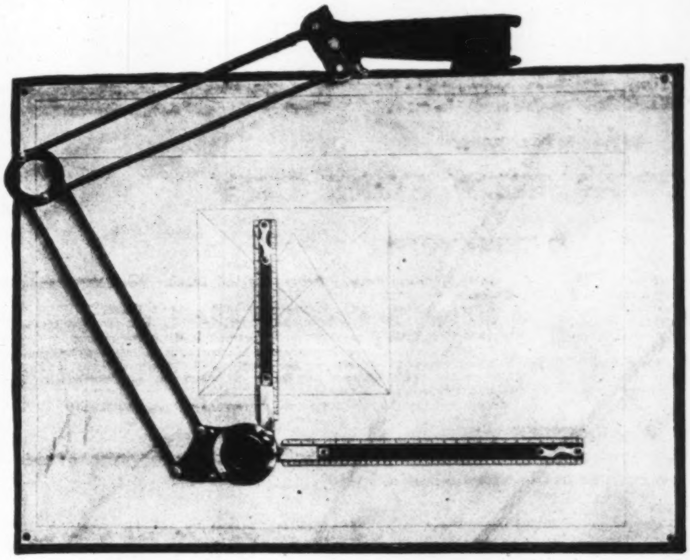

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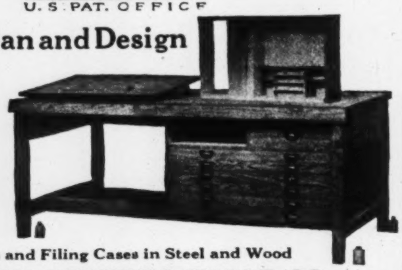

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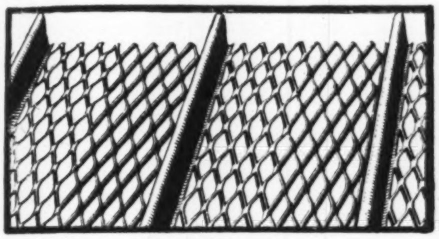
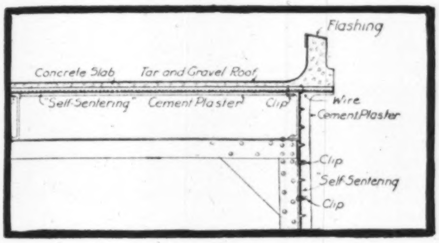
  - Mensch Co., L. J.
- **Compressors, Air**
  - American Well Works, The
  - Chicago Pneumatic Tool Co.
  - De Laval Steam Turbine Co.
  - General Electric Co.
  - Ingersoll-Rand Co.
  - McKiernan-Terry Drill Co.
  - Norwalk Iron Works
  - Schramm & Son, Chris. D
  - Sullivan Machinery Co.
  - Westinghouse Traction Brake Co.
  - Worthington Pump & Machinery Corp.
- **Compressors, Air, Portable**
  - Schramm & Son, Chris. D
- **Compressors, Gas**
  - General Electric Co.
  - Norwalk Iron Works
  - Worthington Pump & Machinery Corp.
- **Concrete Construction**
  - Blaw-Knox Co.
  - Cement-Gun Co.
  - Concrete Engineering Co.
  - Concrete Steel Co.
  - Consolidated Expanded Metal Cos.
  - Foundation Co.
  - Mensch Co., L. J.
  - Raymond Con. Pile Co.
  - Rust Engineering Co.
  - Smith, Hauser & MacIsaac Inc.
  - Trussed Concrete Steel Co
  - Weber Chimney Co.
- **Concrete Floor Covering**
  - Anti-Hydro Waterproofing Co.
  - Trus-Con Laboratories
- **Concrete Floor Hardener**
  - Anti-Hydro Waterprofing Co.
- **Concrete Forms and Moulds**
  - Blaw-Knox Co.
- **Concrete, Hardening**
  - Anti-Hydro Waterproofing Co.
- **Concrete Reinforcement**
  - American Steel & Wire Co.
  - Brown Hoisting Mchy. Co
  - Carnegie Steel Co.
  - Concrete Steel Co.
  - Consolidated Expanded Metal Cos.
  - Electric Welding Co.
  - Franklin Steel Works
  - General Fireproofing Co., The
  - Lackawanna Steel Co.
  - Laclede Steel Co.
  - Trussed Concrete Steel Co.
- **Condensers**
  - Cameron Steam Pump Wks., A. S.
  - Dean Bros. Steam Pump Works
  - Worthington Pump & Machinery Corp.
- **Conduit**
  - Michigan Pipe Co.
- **Contractors' Equipment**
  - Blaw-Knox Co.
  - Dravo-Doyle Co.
  - Hydraulic Pressed Steel Co.
  - Lakewood Engineering Co.
  - Western Wheeled Scraper Co.
- **Contractors' Lights**
  - Milburn Co., Alexander
- **Controllers, Electric**
  - General Electric Co.
- **Conveying Machinery**
  - Gifford-Wood Co.
  - Jeffrey Mfg. Co.
  - Webster Mfg. Co., The
- **Conveyors**
  - Chain Belt Co.
  - Hunt Co., Inc., C. W.
  - Jeffrey Mfg. Co.
  - Ohio Locomotive Crane Co.
  - Robins Conveying Belt Co.
- **Conveyors, Ash**
  - Webster Mfg. Co., The
  - Webster Mfg. Co., The
- **Corner Bead Metal**
  - Consolidated Expanded Metal Cos.
  - Trussed Concrete Steel Co
- **Cranes, Locomotive**
  - Ball Engine Co.
  - Brown Hoisting Mchry. Co
  - Browning Co.
  - Byers Mach. Co., J. F.
  - Dravo-Doyle Co.
  - Clyde Iron Works
  - Erie Steam Shovel Co.
  - Industrial Works
  - McMyler Interstate Co.
  - Ohio Locomotive Crane Co.
  - Orton & Steinbrenner Co.

How to save money on concrete construction—
specify SELF-SENTERING

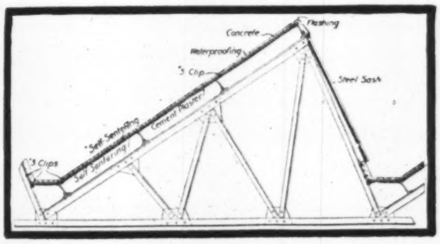
Self-Sentering saves money because it saves material—saves weight—saves time and labor—saves maintenance costs.



SELF-SENTERING


Flashing
Concrete Slab
Tar and Gravel Roof
"Self-Sentering"
Cement Plaster
Clip
Wire
Cement Plaster
Clip
"Self Sentering
Clip

DETAIL OF EAVES OF FLAT SELF-SENTERING ROOF


Flashing
Concrete
Waterproofing
"3 Clip
Steel Sash
"Self-Sentering
Cement Plaster
"3 Clips
Self Sentering

DETAIL OF SELF-SENTERING SAW-TOOTH ROOF

SELF-SENTERING ROOF

Study the diagrams on this page. The first one shows a section of Self-Sentering. Note the strength and rigidity of the material—the parallel series of heavy, cold-drawn ribs, connected by diamond mesh, the most efficient form of expanded metal. Self-Sentering is a combined centering and reinforcing for concrete roof and floor construction. It acts first as form for the wet concrete, and as permanent reinforcing after the concrete is poured. It eliminates the need of temporary wooden forms.

Self-Sentering

Form and Reinforcement for Concrete Construction

Study with special care the two diagrams that show details of Self-Sentering roof construction. Self-Sentering roofs are adapted equally to steel-frame, wood-frame, or concrete-frame buildings. These sheets are merely laid over the roof supports, attached to them securely by clips, wire nails, or staples, and the concrete applied to the required thickness. Only enough passes through the mesh to imbed the steel thoroughly. The under side is then plastered with cement mortar and the roof completed.

The details of Self-Sentering floor construction are illustrated at the bottom of the page.

As in the case of Self-Sentering roofs, floors made of this material are comparatively light in weight, amply strong, fire-resistive, economical to build and maintain, permanent.

Present conditions imperatively demand that the architect or engineer should co-operate closely with his clients in the way of money-saving, enduring construction. That is why Self-Sentering is so logical and so desirable. *Write for complete data.*

THE GENERAL FIREPROOFING COMPANY, Youngstown, Ohio

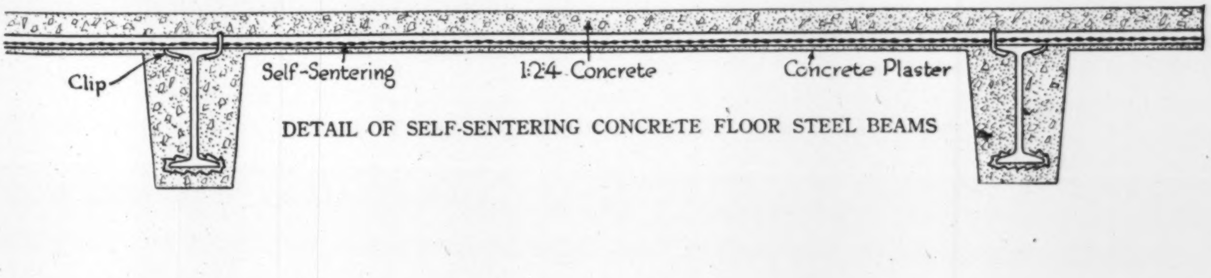
Manufacturers of all types of Metal Lath, Concrete Reinforcements, and Waterproofings

Member Associated Metal Lath Manufacturers

GF
YOUNGSTOWN, OHIO.
Trade Mark Reg. U. S. Pat. Off.

BRANCH OFFICES: New York City, Chicago, Philadelphia, San Francisco, Kansas City, Atlanta, Cincinnati, Buffalo, Utica

The best dealer in your town has GF products in stock


Clip
Self-Sentering
1:2:4 Concrete
Concrete Plaster

DETAIL OF SELF-SENTERING CONCRETE FLOOR STEEL BEAMS

WHAT AND WHERE TO BUY

Cranes and Hoists
Brown Hoisting Mchry. Co.
Whiting Fdry. Equip. Co.
Morse & Sons, A. J.

Cranes, Traveling
Brown Hoisting Mchry. Co
Chesapeake Iron Works
Pawling & Harnischfeger Co.
Terry & Tench Co., Inc.
Whiting Foundry Equipment Co.

Cranes, Wrecking
Browning Co.
Industrial Works
Ohio Locomotive Crane Co.

Creosoted Blocks, Lumber,
Jennison-Wright Co.
Ohio Wood Preserving Co.

Creosoting
American Creosote Works
Barrett Co., The
Jennison-Wright Co.

Crushers and Pulverizers
Allis-Chalmers Mfg. Co.
Austin-Western Rd. Mchy. Co.
Bacon, Earle C.
Buchanan Co., Inc., C. G.
Jeffrey Mfg. Co.
Orton & Steinbrenner Co.
Raymond Bros. Impact Pulverizer Co.
Smidth & Co., F. L.
Smith Co., T. L.
Traylor Engr. & Mfg. Co.
Universal Road Mchry. Co
Worthington Pump & Machinery Corp.
Wright Wire Co.

Culverts
American Sheet and Tin Plate Co.
Armco Iron Culvert and Flume Mfrs. Assn.
Bark River Bridge & Culvert Co.
California Corrugated Culvert Co.
Canton Culvert & Silo Co
Coast Culvert & Flume Co
Corrugated Culvert Co.
Delaware Metal Culvert Co
Dixie Culvert & Metal Co
Hardesty Mfg. Co.
Illinois Corrugated Metal Co.
Independence Culvert Co.
Iowa Pure Iron Culvert Co
Kentucky Culvert Mfg. Co.
Lone Star Culvert Co.
Lyle Corrugated Culvert Co.
Michigan Bridge & Pipe Co.
Montana Culvert Co.
Nevada Metal Mfg. Co.
New England Metal Culvert Co.
North East Metal Culvert Co
Ohio Corrugated Culvert Co.
O'Neall Co., W. Q.
Penn. Metal Culvert Co.
Road Supply & Metal Co.
Sioux Falls Metal Culvert
Spokane Corr. Culvert & Tank Co.
Tennessee Metl. Culvert Co.
Utah Corr. Culvert & Flume Co.
Virginia Metal Culvert Co.
Western Metal Mfg. Co.
Wyatt Metal Works

Curb Boxes, Meter
Cast Iron Pipe Publicity Bureau

Curb, Steel Protected
Electric Welding Co.
Trussed Concrete Steel Co.

Cutters, Steel Collapsible
Foote Concrete Mchry. Co.

Cutting Blowpipes for Steel
Davis-Bournonville Co.
Oxweld Acetylene Co.
Wardwell, F. S.

Dams
Ambrusen Co.
Foundation Co.

Derricks and Derrick Fittings
Byers Mach. Co., J. F.
McMyler Interstate Co
Clyde Iron Works
Dravo-Doyle Co.
Hayward Co.
Lidgerwood Mfg. Co.
National Hoisting Eng. Co.
Terry & Tench Co.
Thomas Elevator Co.

Disinfecting Apparatus
Electro Bleaching Gas Co.
Wallace & Tiernan Co., Inc.

Ditching Machinery
Smith Co., T. L.

Docks and Harbor Work
Canal Construction Co., Inc.

Door and Shutters, Steel Rolling
Edwards Mfg. Co., The

Doors, Steel
Luptons Sons Co., David

Drafting Machines
Universal Drafting Mach. Co.

Drag Line, Cableway Excav.
Ball Engine Co.
Erie Steam Shovel Co.
Lidgerwood Mfg. Co.
Sauerman Bros.

Drawing Material
Aloe Co., A. S.
Alteneder & Sons, Theo.
Defiance Mfg. Co.
Dietzgen Co., Eugene
Keuffel & Esser Co.
Kolesch & Co.
Weber & Co., F.

Drawing Tables
Economy Drawing Table Co.
Kolesch & Co.

Dredges
Bay City Dredge Works
Flory Mfg. Co., S.
Hayward Co
Lidgerwood Mfg. Co.
Marion Steam Shovel Co.
Morris Machine Works
Osgood Co.
Smith & Sons Co., Theo.

Dredging Machinery
Bay City Dredge Works
Blaw-Knox Co.
Worthington Pump & Machinery Corp.

Drills, Core
Ingersoll-Rand Co.
Keystone Driller Co.
McKiernan-Terry Drill Co.
Sullivan Machinery Co.

Drills, Electric
Denver Rock Drill Co.

Drills, Hammer
Denver Rock Drill Co.
Ingersoll-Rand Co.
McKiiernan-Terry Drill Co.

Drills, Pneumatic
Chicago Pneumtaic Tool Co.
Sullivan Machinery Co.

Drills, Rock
Chicago Pneumtaic Tool Co.
Denver Rock Drill Co.
General Electric Co.
Ingersoll-Rand Co.
Jeffrey Mfg. Co.
McKiernan-Terry Drill Co.
Schramm & Son, Chris. D.
Sullivan Machinery Co.

Drums, Hoisting
Blaw-Knox Co.
Hayward Co
Monighan Machine Co.

Dryers, Cement, Asphalt and Sand
Fuller Engineering Co.

Electrical Wires and Cables
American Steel & Wire Co.
General Electric Co.

Elevators
Byers Mach. Co., John F.
Chain Belt Co.
Hunt Co., C. W.
Insley Mfg. Co.
Ohio Locomotive Crane Co.
Ransome Concrete Mchry.
Ridgway & Son Co., Craige
Smith Co., T. L.
Traylor Eng'g & Mfg. Co.

Elevators, Bucket
Gifford-Wood Co.
Hunt Co., C. W.
Jeffrey Mfg. Co.
Ohio Locomotive Crane Co.

Engineers and Contractors
Austin Co., The
Fuller Engrg. Co.
Hedden-Pearson-Starrett Co.
Raymond Con. Pile Co.
Smith, Hauser & MacIsaac, Inc.
Terry & Tench Co.
Whitman A. Co.

Engineers' and Draftsmen's Instruments and Supplies
Ainsworth & Son, Wm.
Aloe Co., A. S.
Alteneder & Sons, Theo.
Beckmann Co., L.
Berger & Sons, C. L.
Blickensderfer Mfg. Co.
Brandis & Sons Mfg. Co.
Buff & Buff Mfg. Co.
Chicago Steel Tape Co.
Defiance Mfg. Co.
Dietzgen Co., Eugene
General Electric Co.
Gurley, W. & L. E.
Higgins & Co., Chas. M.
Keuffel & Esser Co.
Kolesch & Co.
Marchant Calculating Machine Co.
Monroe Calculating Machine Co.
Weber & Co., F.
Weiss Instrument Co.
White Co., David
Young & Sons, Inc.

Engines, Crude Oil
Worthington Pump & Machinery Corp.

Engines, Gas, Gasoline, Oil
Allis-Chalmers Mfg. Co.
Chicago Pneumatic Tool Co.
Scramm & Son, Chris. D.
Western Machinery Co.
Worthington Pump & Machinery Corp.

Engines, High-Duty Pumping
Allis-Chalmers Mfg. Co.
Morris Machine Works

Engines, Hoisting
Allis-Chalmers Mfg. Co.
Byers Mach. Co., John F.
Clyde Iron Works
Flory Mfg. Co., S.
Lidgerwood Mfg. Co.
Monighan Machine Co.
National Hoisting Eng. Co.

Engines, Portable
Leffel & Co., James

Engines, Power Plant
Ball Engine Co.
Erie Steam Shovel Co.

Engines, Pump
Western Machinery Co.

Engines, Traction
Leffel & Co., James

Engines, Water-Works
Worthington Pump & Mchry. Corp.

Excavating Machinery
Austin Drainage Excavator Co., F. C.
Ball Engine Co.
Bay City Dredge Works
Blaw-Knox Co.
Browning Co., The
Buckeye Traction Ditcher Co.
Clyde Iron Works
Economy Excavator Co.
Erie Steam Shovel Co.
Marion Steam Shovel Co.
Monighan Machine Co.
Municipal Engineering & Contracting Co.
Osgood Co., The
Parsons Co., The
Pawling & Harnischfeger Co.
Rochester Excavating Machinery Co.
Smith Co., T. L.
Thew Auto Shovel Co.
Union Iron Works

Excavators, Dragline
Austin Drainage Excavator Co., F. C.
Dravo-Doyle Co.
Economy Excavator Co.
Hayward Co
Lidgerwood Mfg. Co.
Pawling & Harnischfeger Co.

Expanded Metal
Consolidated Expanded Metal Cos.
Trussed Concrete Steel Co

Facing, Foundry
General Electric Co.

Fans, Electric
Westinghouse Electric & Mfg. Co.

Filing Cabinets
Economy Drawing Table Co.

Filters, Apparatus for Water
American Water Softener Co.
Electro Bleaching Gas Co.
International Filter Co.
N. Y. Con. Jewell Filt. Co.
Norwood Eng'g. Co.
Pittsburgh Filter Mfg. Co
Roberts Filter Mfg. Co.
Simplex Valve & Meter Co
Wallace & Tiernan Co., Inc.

Fire Engines, Auto
White Co., The

Fire Escapes, Steel
Berlin Construction Co.

Fire Extinguishers
Badger & Sons Co., E. B.

Fire Hydrants
Flower-Stephens Mfg Co.

Fireproof Material and Construction
Asbestos Protected Metal Co.
General Fireproofing Co., The
Keasbey & Mattison Co.

Flooring
Asbestos Protected Metal Co.
Jennison-Wright Co.

Floor, Wood Block
Barrett Co., The

Flumes, Iron and Steel
Petroleum Iron Works Co.

Flumes, Metal
Armco Iron Culvert & Flume Mfrs. Assn.

Forgings, Steel
Bethlehem Steel Co.
Carnegie Steel Co.

Form Clamps
Blaw-Knox Co.
Concrete Service Co.
Insley Mfg. Co.
Marion Malleable Iron Works
Universal Form Clamp Co.

Forms for Sewers, Conduits, Etc.
Blaw-Knox Co.
Foote Concrete Mchry. Co.

Forms for Walls, Building Construction, Etc.
Blaw-Knox Co.

Forms, Steel, for Concrete Construction
Blaw-Knox Co.
Concrete Engineering Co.

Foundations
American Bridge Co.
Cranford Constr. Co.
Lackawanna Steel Co.
Raymond Concrete Pile Co.
Smith, Hauser & MacIsaac, Inc.
Underpinning & Foundation Co.

Foundry Equipment
Whiting Fdry. Equip. Co.

Frogs and Switches, Railway
Lakewood Engineering Co.
Ramapo Iron Works

Furnaces, Annealing and Tempering
American Gas Furnace Co.
General Electric Co.

Furnaces, Garbage and Refuse
Bartlett & Snow Co., C. O.
Jeffrey Mfg. Co.
Power Specialty Co.

Furnaces, Gas
American Gas Furnace Co.

Garbage-Disposal Apparatus
Jeffrey Mfg. Co

Gaskets
Badger & Sons Co., E. B.

Gas Producers
Improved Equipment Co.

Gates and Valves
Coffin Valve Co.

Gates, Sluice
Chapman Valve Co.
Crane Co., The
Fargo Engineering Co.
Flower-Stephens Mfg. Co.

Gauges, Loss of Head
Simplex Valve & Meter Co.

Gauges, Rate of Flow
Simplex Valve & Meter Co.

Gears
General Electric Co.

Generators
Allis-Chalmers Mfg. Co.
General Electric Co.

Glass Construction
Keppler Glass Constructions, Inc.

Glass, Fireproof
Mississipi Wire Glass Co.

Governors, Water-Wheel
Woodward Governor Co.

Graders, Elevating
Western Wheeled Scra
Co.

Graders, Road
Austin Mfg. Co.
Austin-Western Road M
chinery Co.
Ball Engine Co.
Erie Steam Shovel Co.

Graders, Street
Ball Engine Co.
Erie Steam Shovel Co.

Grading Machinery
Ball Engine Co.
Erie Steam Shovel Co.

Granite
Rockport Granite Co.

Graphite
Dixon Crucible Co., Josep

Grating, Subway
Irving Iron Works

Gravel Excavators
Sauerman Bros.

Gravel Washing Plants
Sauerman Bros.

Hammers, Steam
McKiernan-Terry Drill Co
National Hoisting Eng. Co

Heating Machines fo. Annealing and Tempering
American Gas Furnace Co
General Electric Co.

Hoists, Concrete
Clyde Iron Works
Lakewood Engineering Co.

Hoists, Electric, Gasoline and Steam
Clyde Iron Works
Flory Mfg. Co., S.
Ingersoll-Rand Co.
Lakewood Engineering Co
Lansing Co
Lidgerwood Mfg. Co.
Monighan Mach. Co.
National Hoisting Eng. Co.
Schramm & Son, Chris. D
Smith Co., T. L.
Vulcan Iron Works

Hoists, Headgate
Coffin Valve Co.

Hoists, Pneumatic
Whiting Fdry. Equip. Co.

Hooks, Hoist and Wire Ropes
Wright Wire Co.

Hopper, Concrete Gravity
Insley Mfg. Co.

Hose, Metallic
American Metal Hose Co.

Hose, Steam
American Metal Hose Co.

Hose, Suction
American Metal Hose Co.

Hydrants
Eddy Valve Co.
Kennedy Valve Mfg. Co.
Norwood Engineering Co.
Rensselaer Valve Co.
Smith Mfg. Co., A. P.
Wood & Co., R. D

Hydro-Electric Construction
General Electric Co.

Inks and Adhesives
Higgins Co., C. M.

Inserts, Concrete
Security Insert Co.
Trussed Con. Steel Co.

Inspecting
(See Directory of Engineers)

Instruments, Drawing
Defiance Mfg. Co.
Dietzgen Co., Eugene
Keuffel & Esser Co.

Instruments, Surveying
Defiance Mfg. Co.
Dietzgen Co., Eugene
Keuffel & Esser Co.
White Co., David
Young & Sons, Inc.

Iron Work, Structural and Ornamental
Christopher & Simpson Iron Works

Jacks
McKiernan-Terry Drill Co.
Norton, Inc., A. C.

Joints, Expansion, Copper
Badger & Sons, E. B.

Joints, Expansion, Paving
Barrett Co., The
Carey Co., Philip
Trussed Concrete Steel Co.

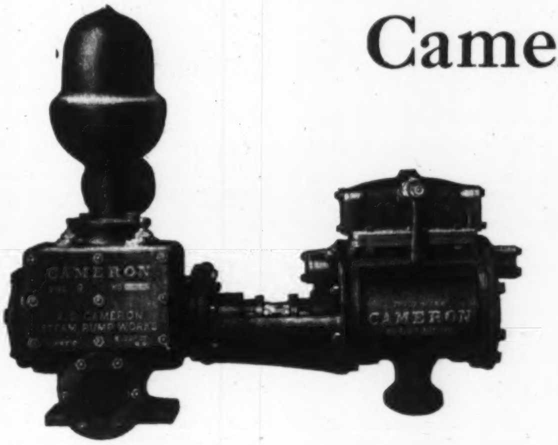
Joint Filler, Paving
Barrett Co., The
Standard Oil Co. of N. Y.

Joints, Flexible Pipe
Coldwell-Wilcox Co.
Crane Co., The
U. S. Cast Iron Pipe & Foundry Co.

The Slogan of the Cameron—"Character: The Grandest Thing"

When You Buy Your Next Pump Consider Upkeep Cost

Don't be misled by low initial cost. That means a cheap pump. It means high upkeep cost, shorter life and less service. Consider upkeep cost when you buy your next Pump. Consider the Cameron and its record—over half a century of Pump building—over 70,000 Cameron Pumps in service today.



Cameron Pumps

are not expensive in first cost, but they do cost more than some pumps. But in the end they cost less than any other pump at any price. The Cameron record proves this.

Cameron Pumps are strong and serviceable. Have few working parts—none exposed. No outside valve gear. The ideal pump for long life and low upkeep.

Ask for Bulletin No. 7104.

A. S. Cameron Steam Pump Works
11 Broadway, New York
Offices The World Over

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THE WAR is no respecter of persons—even Uncle Sam is not exempt from its inconveniences.

WHAT AND WHERE TO BUY

Kilns, Lime
- Improved Equipment Co.
- Petroleum Iron Works Co.

Lamps, Arc and Incandescent
- General Electric Co.

Lamps, Electric
- General Electric Co.

Lamps, Flood
- General Electric Co.
- Western Electric Co.

Lath, Metal
- Armco Iron Culvert and Flume Mfrs. Assn.
- Asbestos Protected Metal Co.
- Consolidated Expanded Metal Cos.
- General Fireproofing Co., The
- Mitchell-Tappen Co.

Lead Pencils
- Dixon Crucible Co., Jos.

Leadite
- Leadite Co., Inc., The

Lights, Contractors'
- Carbic Mfg. Co.
- General Electric Co.
- Milburn Co., Alex.

Lights, Portable
- Carbic Mfg. Co.
- Milburn Co., Alex.

Lights, Roof
- Keppler Glass Constructions, Inc.

Lights, Vault
- Keppler Glass Constructions, Inc.

Lime
- Hydrated Lime Bureau
- Natfonal Lime Mfrs. Assn.

Lime, Hydrated
- Hydrated Lime Bureau
- National Lime Mfrs. Assn

Loaders, Wagon
- Bonney Supply Co.
- Gifford-Wood Co.
- Haiss Mfg. Co., Inc., Geo.
- Jeffrey Mfg. Co.

Lockers, Steel
- Edwards Mfg. Co., The
- Lupton's Sons Co., David

Locomotives, Compressed Air
- Porter & Co., H. K.
- Vulcan Iron Works

Locomotives, Electric
- American Locomotive Co.
- General Electric Co.
- Jeffrey Mfg. Co., The

Locomotives, Fireless Steam
- Porter Co., H. K.

Locomotives, Gasoline
- Bell Locomotive Wks., Inc.
- Vulcan Iron Works

Locomotives, Steam
- American Locomotive Co.
- Bell Locomotive Works
- Porter Co., H. K.
- Vulcan Iron Works

Logging Outfits
- Parsons Co., The

Lubricants
- Dixon Crucible Co., Joseph
- Greene, Tweed & Co.
- Texas Company, The

Lumber
- Bowers Co., S. P.
- Great Southern Lumber Co.
- Pearson & Luduscher Lumber Co., Inc.
- Southern Pine Sales Corp.

Machinery and Equipment, Second-Hand
- (See advts. in Searchlight Section)

Manometers
- Simplex Valve & Meter Co

Manhole Covers
- Bissell Co., F.
- Central Foundry Co.
- Sessions Foundry Co.

Metal Forms for Concrete
- American Bridge Co.
- Hydraulic Pressed Steel Co.

Metals, Perforated
- Chicago Perforating Co.

Metal, Reinforcing, for Concrete Work
- Consolidated Expanded Metal Cos.
- Franklin Steel Works
- Mitchell-Tappen Co.
- Wright Wire Co.

Meter Box Covers
- Buffalo Meter Co.
- Cast Iron Pipe Publicity Bureau
- Pittsburgh Meter Co.

Meter Boxes
- Pittsburgh Meter Co.

Meters, Current
- General Electric Co.
- Gurley, W. & L. E.

Meters, Irrigation
- Hydrometric Co.

Meters, Water, Oil and Gas
- Buffalo Meter Co.
- General Electric Co.
- Neptune Meter Co.
- Pittsburgh Meter Co.
- Simplex Valve & Meter Co
- Worthington Pump & Machinery Corp.

Meter Provers
- Pittsburgh Meter Co.

Meters, Steam
- General Electric Co.

Mining Machinery
- Sullivan Machinery Co.
- Worthington Pump & Machinery Corp.

Mixers, Cement and Concrete
- American Cement Machine Co.
- Blaw-Knox Co.
- Cement-Gun Co.
- Foote Concrete Mchry. Co.
- Lakewood Engineering Co.
- Lansing Co.
- Municipal Engineering & Contracting Co.
- Northwestern Steel & Iron Works
- Ransome Concrete Machinery Co.
- Schramm & Son, Chris. D.
- Smith Co., T. L.
- Traylor Engrg. & Mfg. Co.
- Worthington Pump & Machinery Corp.

Mixers, Grout
- Ransome Concrete Machinery Co.

Mixers, Mortar
- American Cement Machine
- Lakewood Engineering Co.
- Lansing Co.
- Municipal Engineering & Contracting Co.
- Northwestern Steel & Iron Works
- Ransome Concrete Machinery Co.
- Smith Co., T. L.

Molds, Pipe and Culvert
- Blaw-Knox Co.
- Foote Concrete Machinery Co.

Motors, Electric
- General Electric Co.

Oil, Lubricating
- Texas Company, The

Packing, Water-Pipe
- Greene, Tweed & Co.

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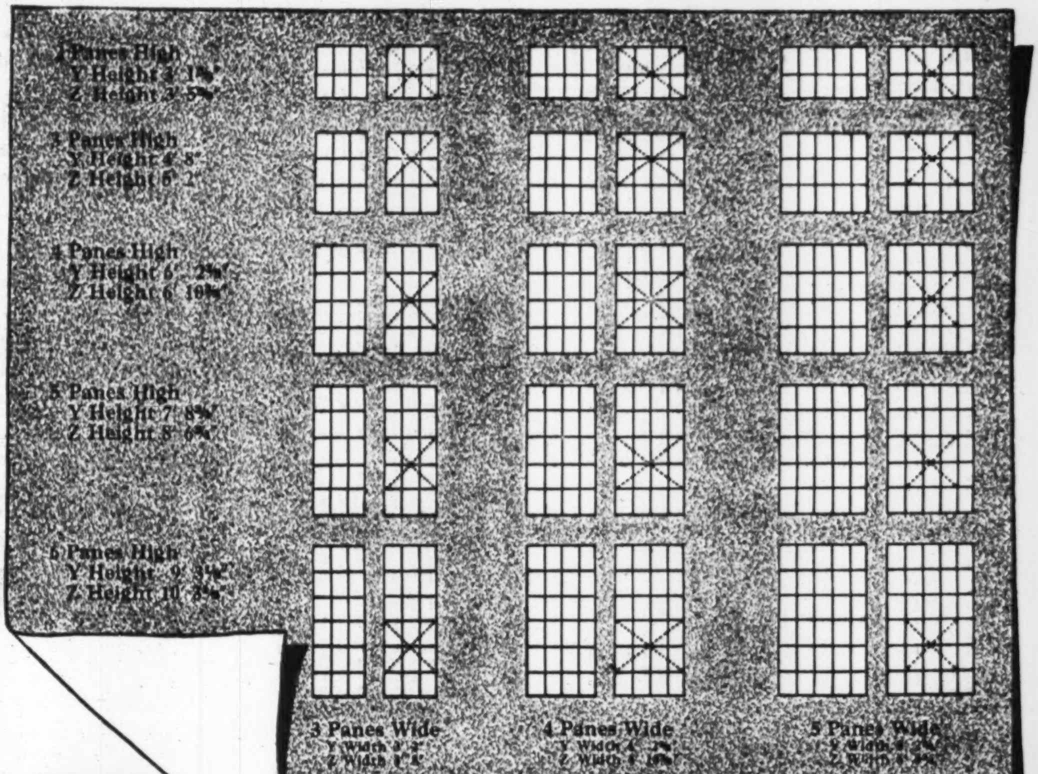
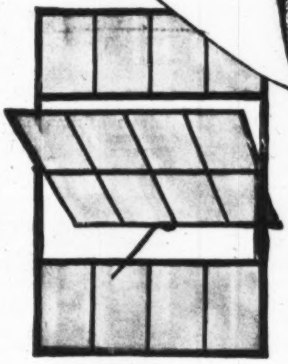

2 Panes High
Y Height 3' 1"
Z Height 3' 5"
3 Panes High
Y Height 4' 8"
Z Height 5' 2"
4 Panes High
Y Height 6' 2"
Z Height 6' 10"
5 Panes High
Y Height 7' 8"
Z Height 8' 6"
6 Panes High
Y Height 9' 3"
Z Height 10' 3"
3 Panes Wide
4 Panes Wide
5 Panes Wide

Y=12"x 18" Glass. Combine Y Widths with Y Heights
Z=14"x 20" Glass. Combine Z Widths with Z Heights



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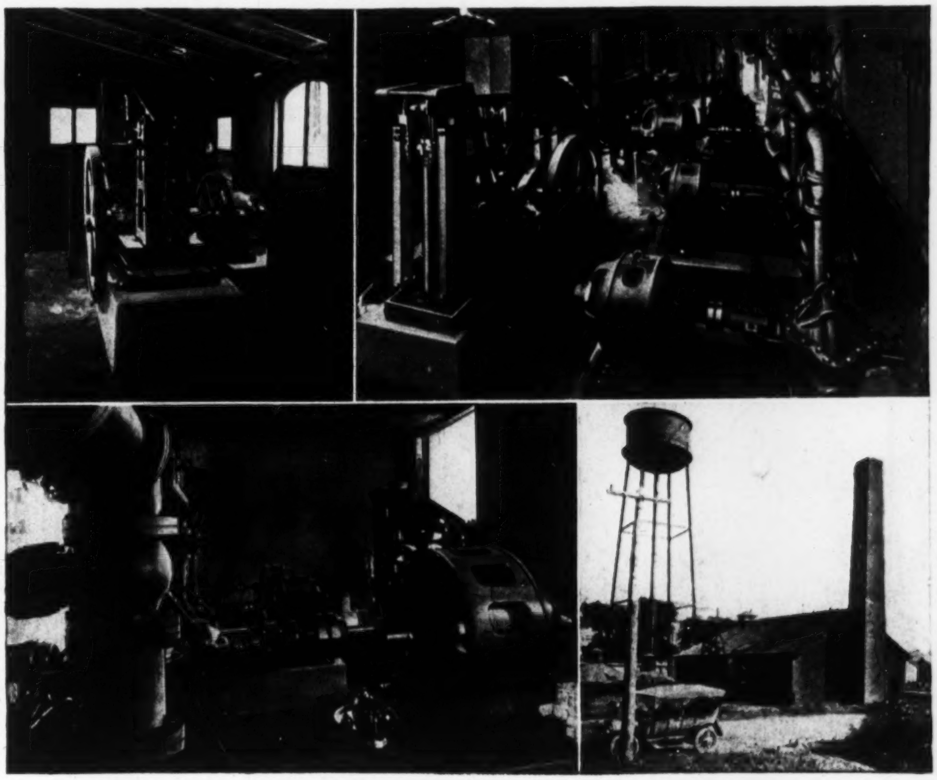

Reducing the Cost of Operation by Modernizing the Waterworks Plant

Substituting modern electrically-driven pumps for antiquated steam pumps in the waterworks plant enabled the town of Bushnell, Ill., to obtain more flexible equipment and greatly reduce the cost of operation.

Bushnell has a population of about 2700 and has a daily water consumption of approximately 125,000 gallons. The water supply is furnished by two 10-inch wells, each about 1800 feet deep, one of which is located in, and the other immediately adjoining the pumping plant.

In these wells were installed two No. 1½, Figure 475, 36-inch stroke "American" deep well power heads, each connected by rawhide pinions to 7½ h.p., 3-phase, 60-cycle, 440-volt, slip ring motors geared to operate at 22 r.p.m., and each operating a 36-inch stroke 5¾-inch double-acting water cylinder placed 200 feet in the well and having a capacity of 170 g.p.m.

The deep well pumps deliver water to a surface reservoir which forms the supply for three new horizontal double suction single stage "American" centrifugal pumps direct connected to electric motors. Two of these pumps are each 3-inch discharge pipe diameter, driven by a 15-h.p. 3-phase, 60-cycle, 2200-volt, slip ring motor and having a capacity of 300 g.p.m. against 50 lb. pressure, when operating at 1750 r.p.m. The duty of these pumps is to deliver water either into elevated tank or directly into the mains for domestic service.

The third pump is an "American" 8-inch high pressure horizontal, single stage, double suction type, direct connected to 100-h.p., 3-phase, 60-cycle, 2200-volt, slip ring motor and having a capacity of 1000 g.p.m. against 100-lb. pressure when operating at 1750 r.p.m. The duty of this pump is to furnish high pressure in case of fire.

The accompanying illustrations show exterior and interior views of this installation. Electric current is purchased from the Central Illinois Public Service Co. This installation demonstrates how old water supply plants may be modernized with "American" pumps making use of existing wells, reservoir and elevated tank and greatly reduce the cost of operation and up-keep.

American centrifugal pumps are described in catalog 149 and deep well pumps in catalog 130. Write for them.

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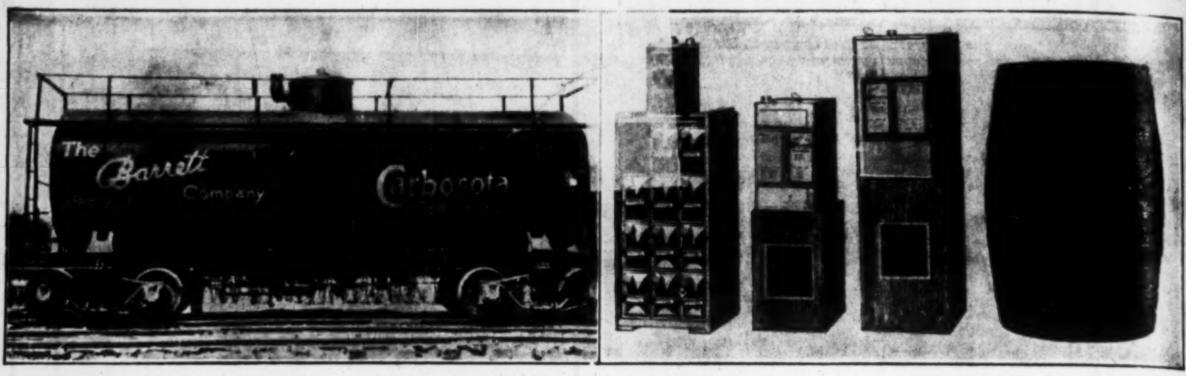

Tank-car (10,000 *gallons*), 1-*gallon can*, 5-*gallon can*, 10-*gallon can*, 1 *wooden barrel.*
(*Any quantity may be conveniently obtained*)

Pure Coal-Tar Creosote Oil

Barrett's B
Carbosota
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Creosote Oil

has proved to be the *most efficient* of all wood-preservatives.

Carbosota Creosote Oil is simply that, refined and made physically fit for use in the Open-Tank Process and by the Brush Method.

Specify Carbosota—Don't Experiment. Carbosota conforms to a *standard* specification, which assures a pure, high-grade oil, refined to meet the physical requirements which are essential to the success of non-pressure treatments, combining highest toxicity practicable with low viscosity and permanence.

Briefly, Carbosota Creosote Oil meets the three chief requirements of non-pressure treatments to the fullest extent, namely:

Efficiency—It has proved to be the most effective protection against decay for structural wood. Coal-tar creosote has been used for nearly four score years in this country. Its consumption in the wood-preserving industry has reached more than 100,000,000 gallons annually, due exclusively to merit.

Economy—Carbosota Creosote Oil employed in the Open-Tank Process or by the Brush Method is economical and simple. The expense of treatment represents a proportionately small percentage of the cost of lumber.

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Thus wood-preservation is placed within the reach of the smallest as well as the larger consumers.

As the largest producers of Creosote Oil in the United States, we are able to maintain a standard of service which cannot be equaled, and this is at the disposal of all who may be interested in wood-preservation. Detailed data and technical assistance may be obtained by addressing nearest office.

(Note: Green wood cannot be effectively creosoted by non-pressure processes. It should be air-dry. In regions of moist, warm climate, wood for some species may start to decay before it can be air-dried. Exception should be made in such cases, and treatment modified accordingly.)

Booklet regarding the CARBOSOTA *treatment free on request*

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